VISIT…

# Nob Yoshigahara Puzzle Design Competition
# IPP 26, Boston, USA

**The Maze Burr by Kagen Schaefer**
**Puzzle of the Year**

Floppy Cube
Katsuhiko Okamoto

A Chance Meeting
Tatuo Miyamoto

Box With a Tree
Hiroshi Iwahara

Cover It Up
Robert Reid

Sequential Star
Lee Krasnow

**01**

# 20 Ball Pyramid Puzzle "Twinten"

**Puzzle Goal:** **Make a 20 ball pyramid.**

**Materials:** Dogwood

**Classification:** Put-together

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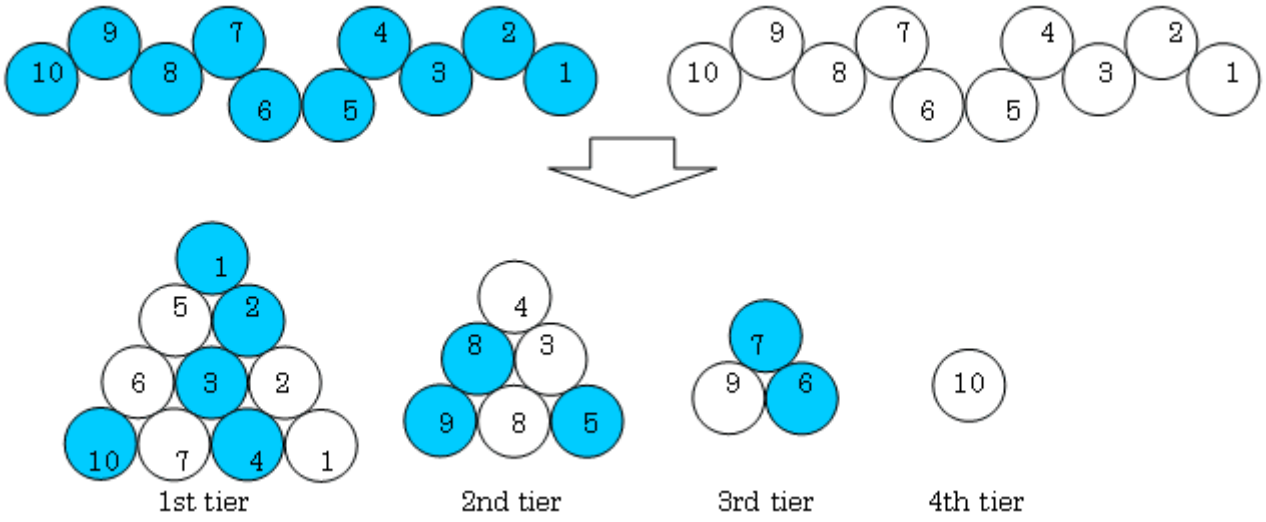
# 01 20 Ball Pyramid Puzzle "Twinten"

**Puzzle Solution**:

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**02**

# 3D Silhouette H

**Puzzle Goal:** **Assemble the pieces in a free-standing arrangement so that in three directions the silhouette is an H-shape.**

**Materials:** Padauk

**Classification:** 3D Assembly

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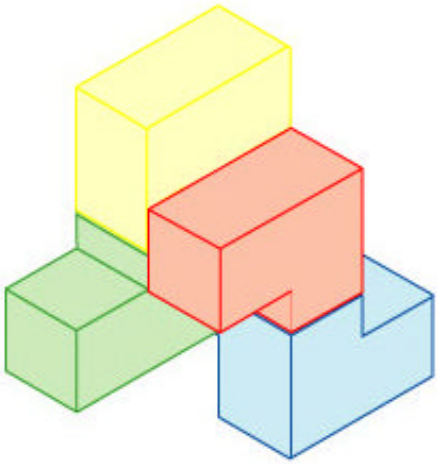
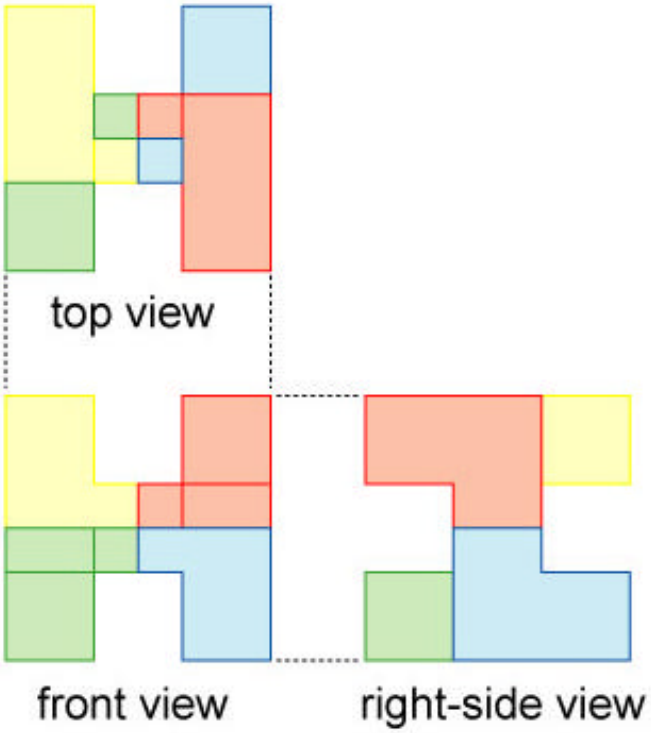
# 02 3D Silhouette H

**Puzzle Solution**:



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**03**

# A Chance Meeting

**Puzzle Goal:** **Find the secret compartment.**

**Materials:** Oak, Purple Heart

**Classification:** Trick opening

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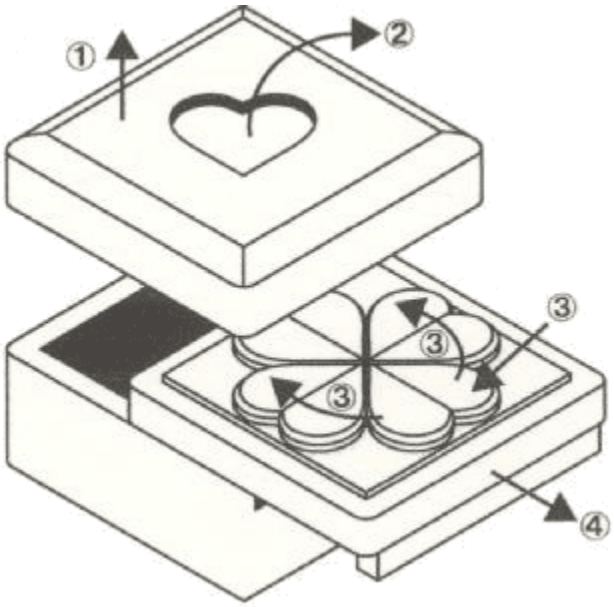
# 03 A Chance Meeting

**Puzzle Solution**:

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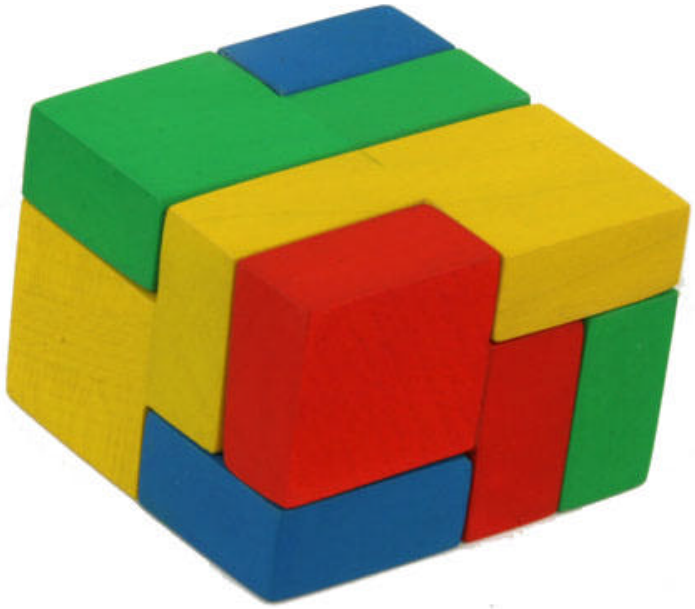
**04**

# Albis Diamond

**Puzzle Goal:** **Put the 4 different pieces together to form a rhomboid (diamond).**

**Materials:** Wood

**Classification:** 3D Assembly



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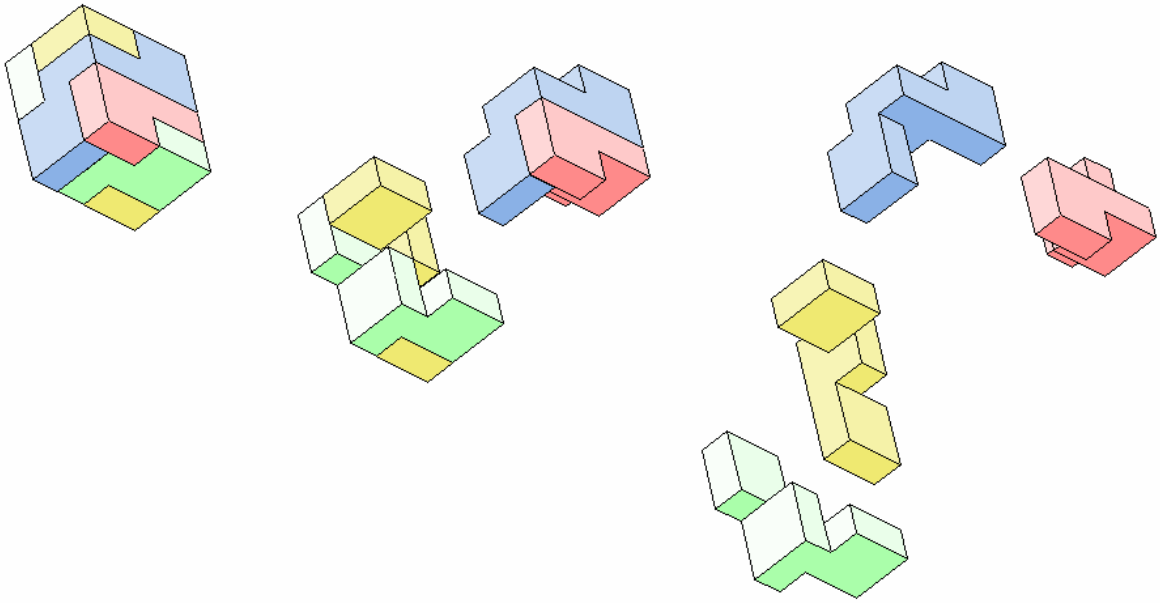
# 04 Albis Diamond

**Puzzle Solution**:

First put the red and the blue, the green and yellow pieces together and then complete the diamond as shown. It is not possible to put the 4 pieces sequentially together!



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**05**

# Anorexic Cube

**Puzzle Goal:** **Build a stable "cube" using the eight identical parts.**
**Also, balance the figure on an edge.**

**Materials:** Stainless Steel

**Classification:** 3D Assembly

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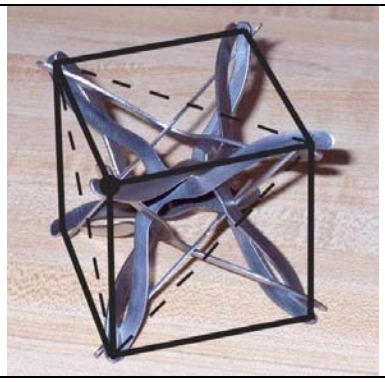
# 05 Anorexic Cube

**Puzzle Solution**:



**1)** Visualize a cube and observe that the three vertices that neighbor a vertex form an equilateral triangle in space. Cubes have eight vertices, so eight such triangles. Keep in mind that each puzzle part corresponds to one of these triangles.

**2)** Observe how three arms (from three different parts) can spiral together to make a "tornado". Keep in mind during the construction to keep arms twisted into such a tornado whenever possible. Everything is unstable until the last step is complete, but maintaining this twist wherever possible will help stabilize the partial structure somewhat.

**3)** Begin with a stack of parts all spiraling clockwise. Keep in mind that the side now facing up will face outwards during the construction.

**4)** Start the assembly with four parts together in a square. It is easiest to first do two opposite parts, then weave in the remaining two, observing the over/under pattern. Tilt the parts so all tips are at corners of an imagined cube.

**5)** Holding the partial assembly down with one hand, use your other hand to weave in the remaining parts one at a time. Maintain a tornado where three arms meet. The last piece "screws in" nicely (shown above while holding the opposite tornado). To close the last tornado, move the tips of three pieces past each other simultaneously.

**6)** Balancing the *Anorexic Cube* on a corner or an edge is not difficult if the tips extend equally. Compress opposite points between thumb and middle finger while fine-tuning the assembly as necessary.

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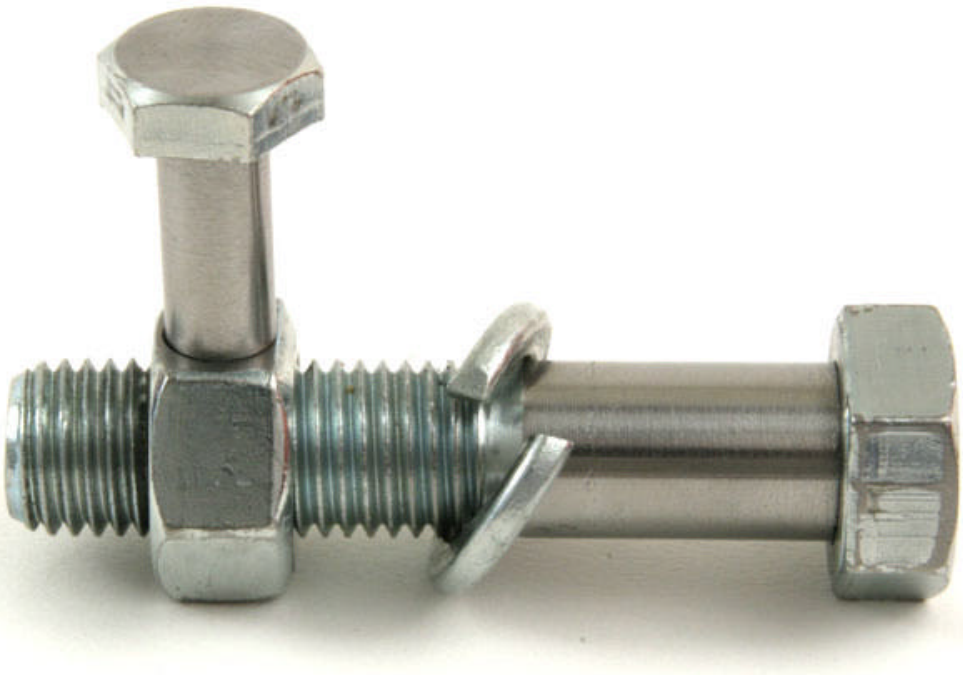
**06**

# Bolt in Bolt

**Puzzle Goal:** **Separate the ring from the bolt.**

**Materials:** Polished Iron

**Classification:** Take-apart



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# 06 Bolt in Bolt

**Puzzle Solution**:

As seen from the figure 1, the puzzle consists of two bolts (A, B), a nut (C) and a ring/mote (D). The task, separating the mote from the larger bolt, is accomplished by unscrewing the nut after a few steps.

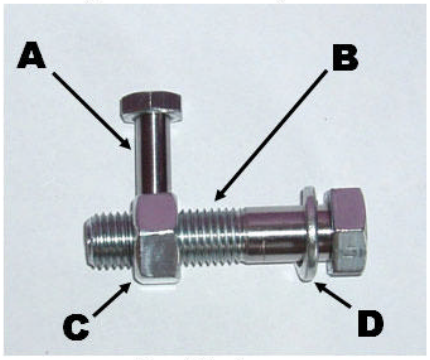


**Figure 1:Puzzle parts**

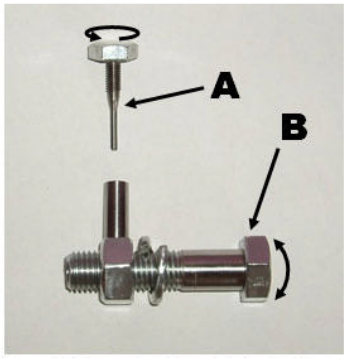


**Figure 2: Unscrewing the smaller bolt end**

*Step 1:* Unscrew the inner part of the smaller bolt (A in fig. 2) counterclockwise off the puzzle. If the smaller bolt seems too tight, wiggle the end of the larger bolt (B in fig. 2) a bit to loosen the smaller bolt. See figure 2.

*Step 2:* Unscrew the inner part of the larger bolt (B in fig.3) *clock*wise, so that it comes partway off. Do not try to take the larger bolt end totally off the puzzle. If the part seems a bit too tight, wiggle the remainder of the smaller bolt (A in fig. 3). See figure 3.

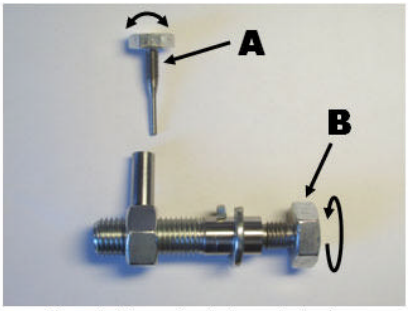


**Figure 3: Unscrewing the larger bolt end**

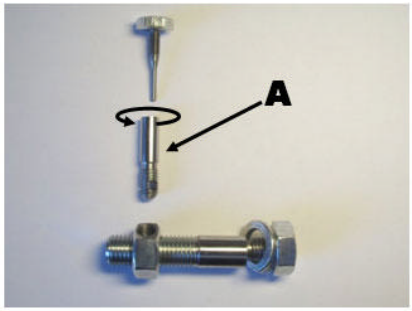


**Figure 4: Removing the remainder of the smaller bolt**

*Step 3:* Unscrew the remainder of the smaller bolt (A in fig. 4) counterclockwise to take it off. See figure 4.

*Step 4:* Unscrew the nut from the larger bolt and remove the mote. See figures 5-6.

**Figure 5: Nut removed**

**Figure 6: Disassembled puzzle**

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**07**

# Box in Box

**Puzzle Goal:** **Find the secret compartment.**

**Materials:** Katura, chanchin

**Classification:** Secret opening

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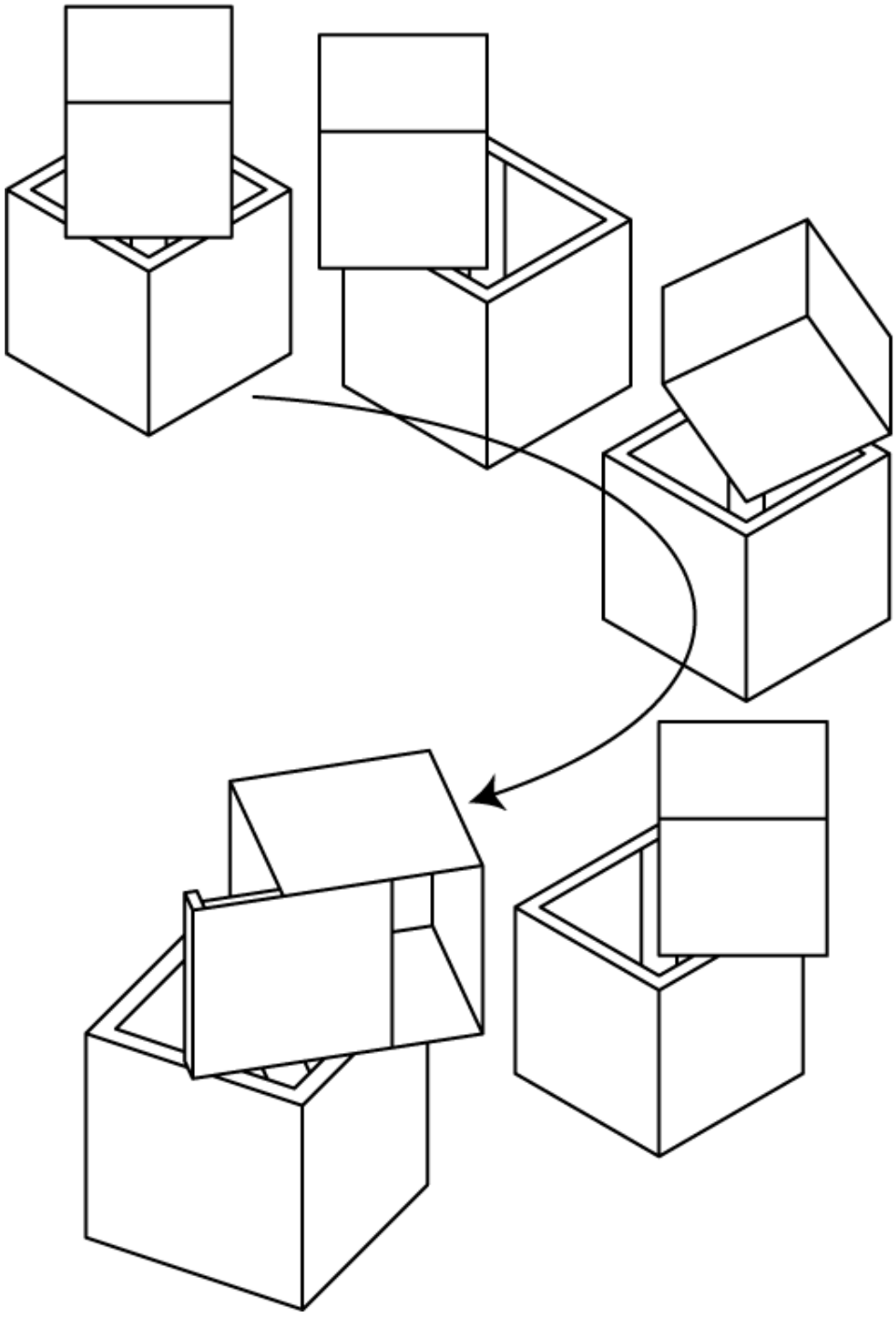
**07**

# Box in Box

**Puzzle Solution**:



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**08**

# Box with a Tree

**Puzzle Goal:** **Find the secret compartment.**

**Materials:** Walnut, oak, acrylic board

**Classification:** Trick opening

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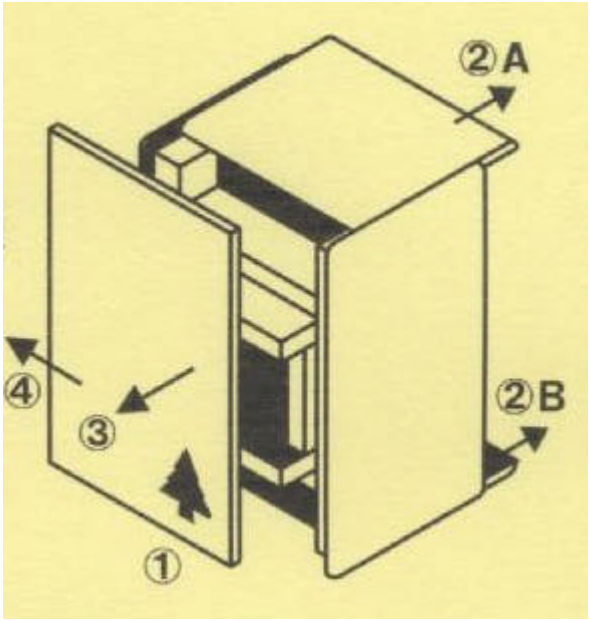
# 08 Box with a Tree

**Puzzle Solution**:

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**09**

# Bump cube

**Puzzle Goal:** **Mix up, then restore the cube.**

**Materials:** ABS and Polyurethane resin

**Classification:** Rotating Cube

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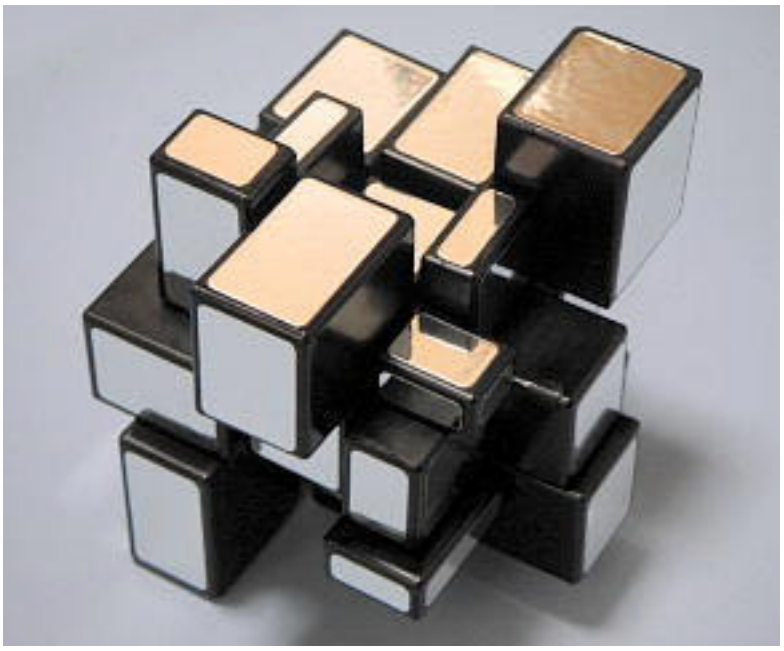
# 09 Bump cube

**Puzzle Solution**:

Solve like Rubik's Cube, but this one can be solved by "feel".



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**10**

# Cock-A-Doodle-Doo

**Puzzle Goal:** **Find the needle in the haystack.**

**Materials:** Wood, hay

**Classification:** Hidden Object

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# 10 Cock-A-Doodle-Doo

**Puzzle Solution**:

Inside the head of the cock is a powerful magnet, which can easily attract the needle, finding it quickly and with little damage to the hay.

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**11**

# Cover it Up

**Puzzle Goal:** **Arrange the four dark wood pieces so that the seven light wood pieces cover all of the dark wood. The dark pieces are to lie flat and not overlap.**

**Materials:** Wenge and Yellow heart

**Classification:** Put-together

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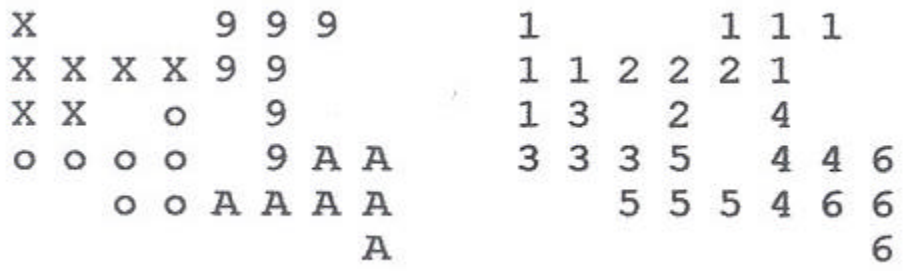
**11**

# Cover it Up

**Puzzle Solution**:

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**12**

# CrossWindows

**Puzzle Goal:** **Assemble the six pieces to form the pictured solid.**

**Materials:** Palissander, maple, padauk

**Classification:** Interlocking Solid

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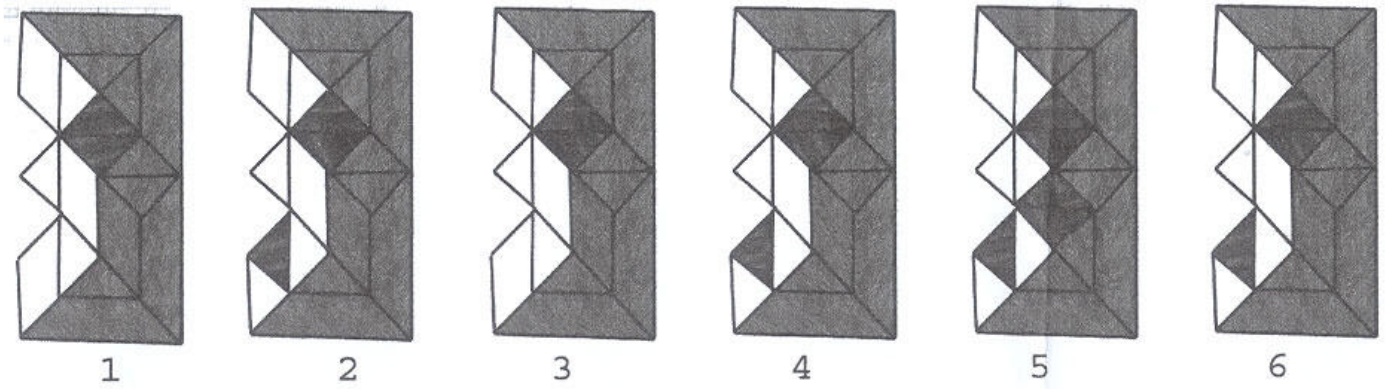
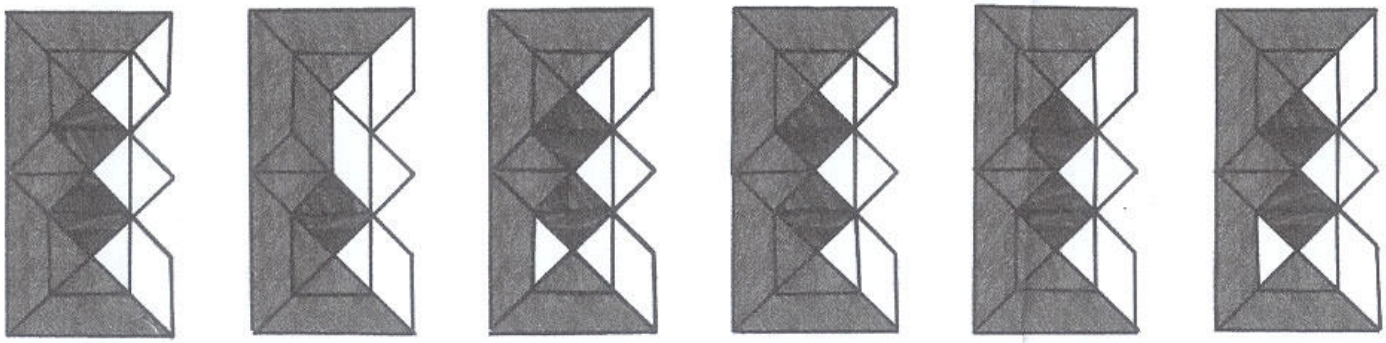
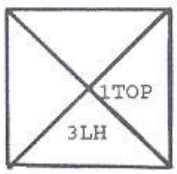
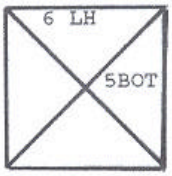
# 12 CrossWindows

**Puzzle Solution**:



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**13**

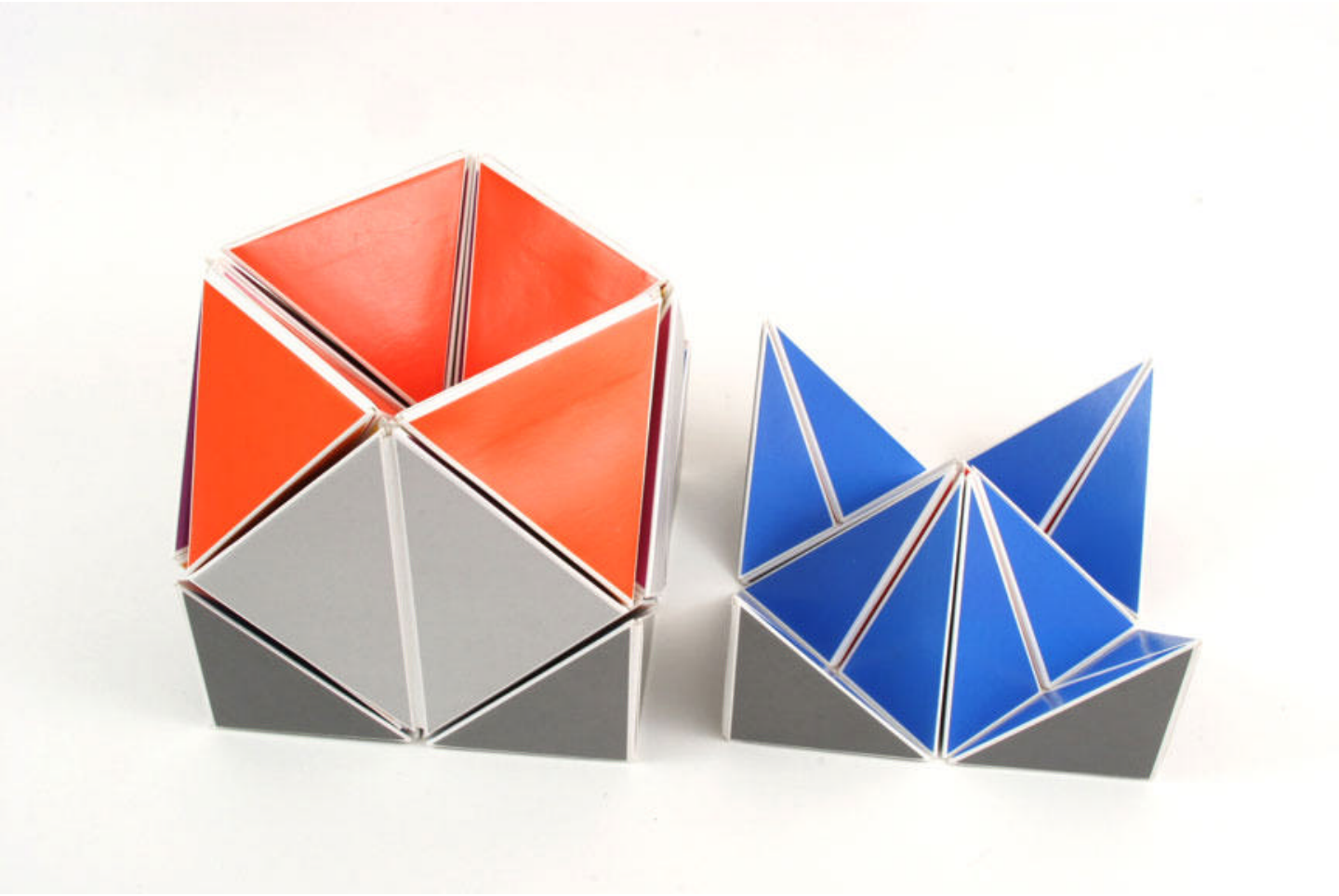
# cube one

**Puzzle Goal:** **1. Form the two pairs of platonic solids: two octahedra and two tetrahedra.**

**2. Put them together to form a cube (three variations).**

**Materials:** Stiff cardboard

**Classification:** Take-apart, Put-together



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# 13 cube one

**Puzzle Solution**:

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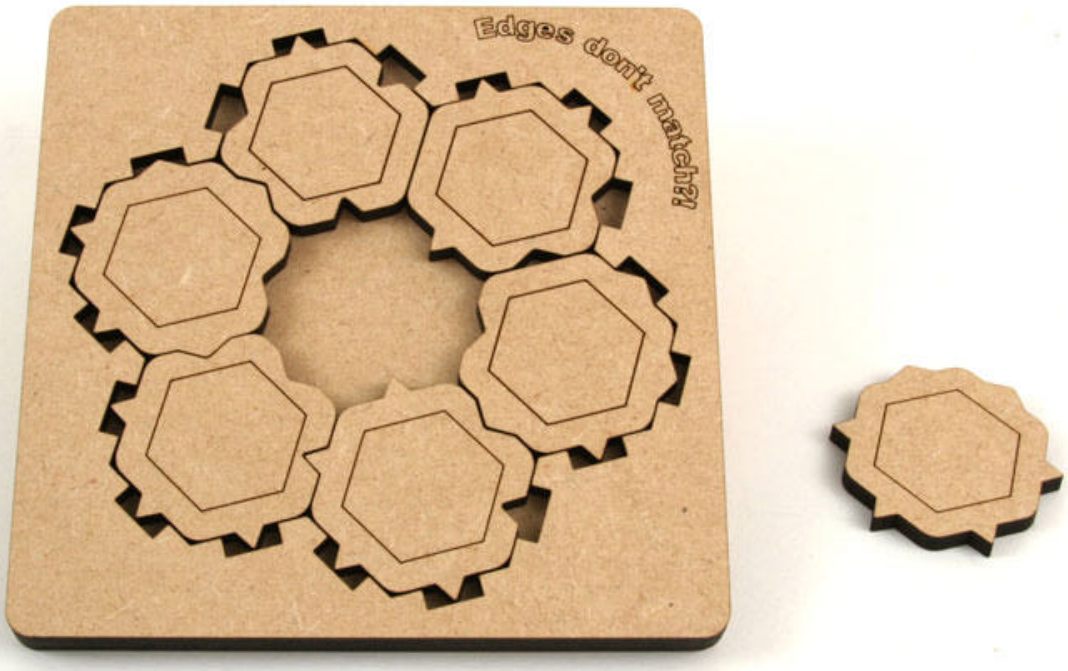
**14**

# Edges Don't Match?!

**Puzzle Goal:** **Place the pieces in the tray with all pieces facing up.**

**Materials:** Laser-cut MDF

**Classification:** Edge-matching

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# 14 Edges Don't Match?!

**Puzzle Solution**:

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**15**

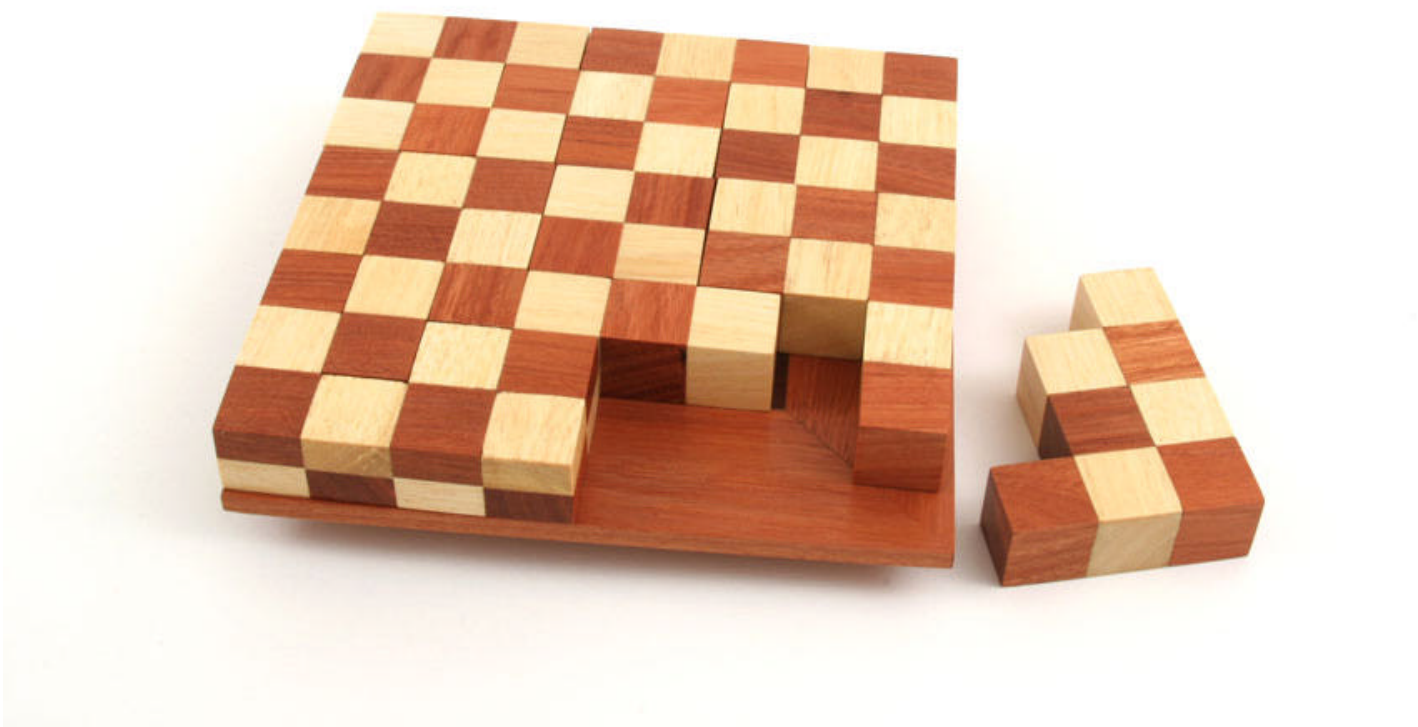
# Eureka Puzzle

**Puzzle Goal:** **Put the 8 pieces in an 8x8 array in checkerboard pattern. Pieces may be turned over.**

**The 8 pieces will also make a 4x4 cube in the square on the raised side of the base (it does not assemble in a checkerboard pattern).**

**Materials:** Blue gum, silver ash, jarrah (base)

**Classification:** 2D/3D Assembly



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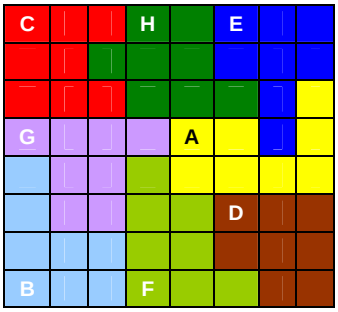
**15**

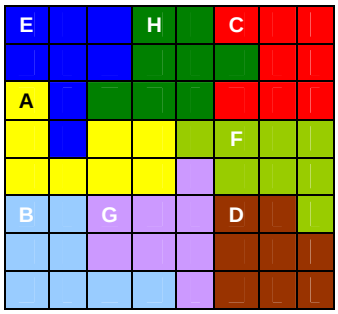
# Eureka Puzzle

**Puzzle Solution**:

### Solutions to the 8x8 array




### Solution #1




Solution #2

### Solution to the 4x4 Cube
**(Colors ignored)**

| Bottom Layer | 2nd Layer | 3rd Layer | Top Layer |
|---|---|---|---|
| D D E B<br>A H E B<br>A E E E<br>A E E E | D D D B<br>H H H B<br>G G G G<br>A C C C | D D D B<br>H H H B<br>A G G B<br>A C C B | F F F F<br>H F F F<br>A G G F<br>A C C C |

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**16**

# Ezekiel's Wheel

**Puzzle Goal:** **The objective of the puzzle is to disassemble the Triple Linked Torbus and assemble each Torbus separately.**

**Then reassemble the "Ezekiel's Wheels" puzzle.**

**An interesting variation for any of the Torbus or segmented Toroid puzzles is to add a small Toroid**

**Materials:** Wood

**Classification:** 3D Assembly

**Notes:** The spiral cut is made by rotating the cross section one half a degree as the Toroid turns one degree. By making, two such parallel cuts (one on either side of the toroid cord) a Mobius ring emerges from a Torus. I call this geometric form a Torbus.

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# 16 Ezekiel's Wheel

**Puzzle Solution**:

The “Ezekiel’s Wheel” puzzle is composed of three separable Torbus. One Torbus has the two parts shown in A, another has the three parts shown in B and the third has the five parts shown in C.

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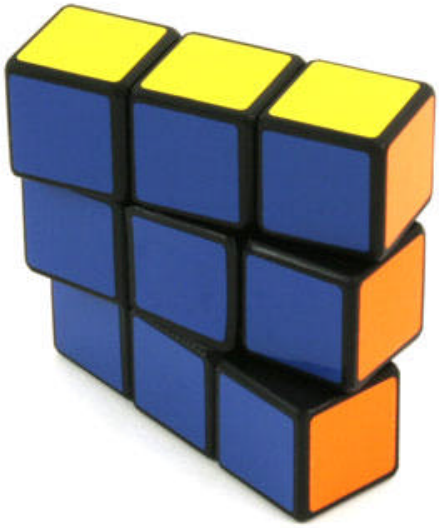
**17**

# Floppy Cube

**Puzzle Goal:** **Scramble first, then restore all faces, like Rubik's Cube.**

**Materials:** ABS resin, POM

**Classification:** Rotating Cube



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# 17 Floppy Cube

**Puzzle Solution**:

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**18**

# Hurly Burly

**Puzzle Goal:** **Take apart and then put together.**

**Materials:** ABS 3D print

**Classification:** Interlocking solid

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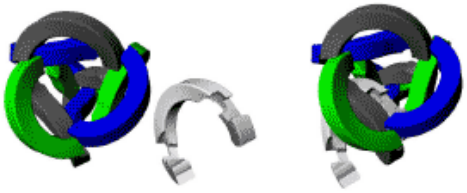
# 18 Hurly Burly

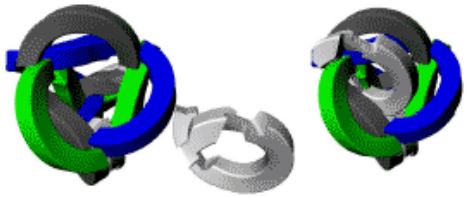
**Puzzle Solution**:

Step 1: Bring the black and green pieces together

Step 2: Wriggle in the blue piece

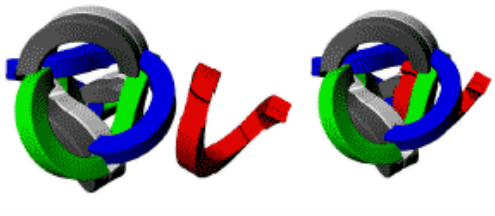


Step 3: Screw in one white piece

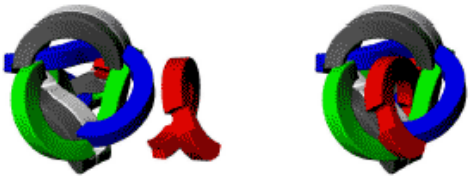


Step 4: Screw in the other white piece

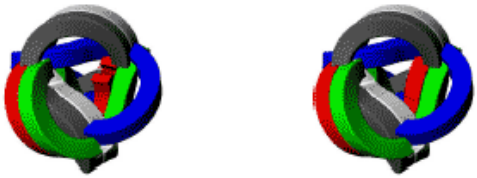
Step 5: Lock the two white pieces in position (coordinated motion



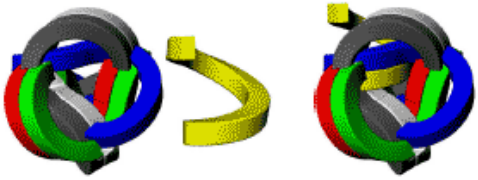
Step 6: Screw in one red piece



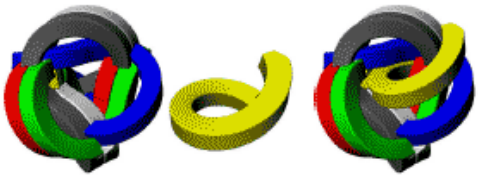
Step 7: Screw in the other red piece



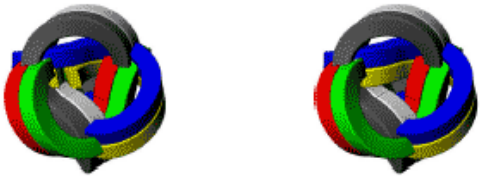
Step 8: Lock the two red pieces in position (coordinated motion



Step 9: Screw in one yellow piece



Step 10: Screw in the other yellow piece



Step 11: Lock the two yellow pieces in position (coordinated motion)

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**19**

# Ichigo Shortcake

**Puzzle Goal:** **Find the secret compartment.**

**Materials:** Padauk, Dogwood, Zelkova, Maple

**Classification:** Secret opening

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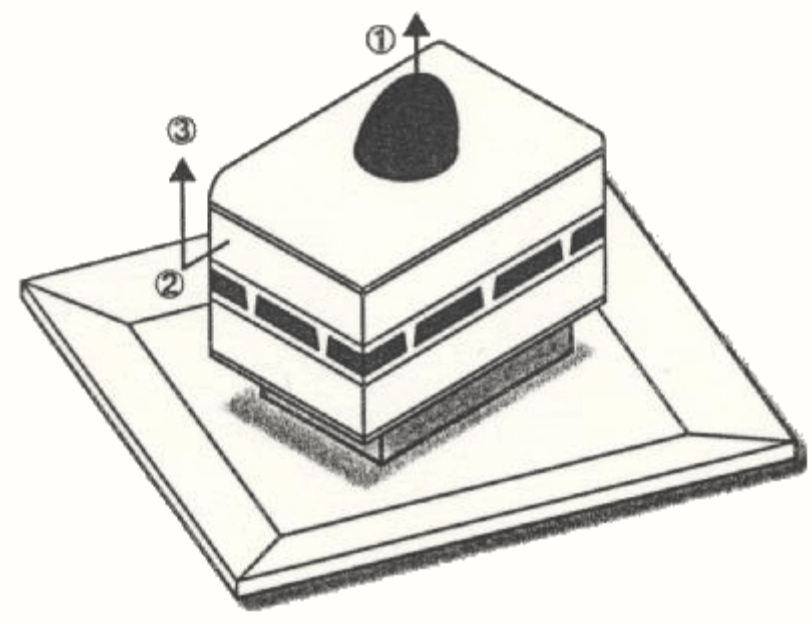
# 19 Ichigo Shortcake

**Puzzle Solution**:

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**20**

# In Brackets

**Puzzle Goal:** **Take apart the trapped cube.**

**Materials:** Pine and mahogany

**Classification:** Take-apart

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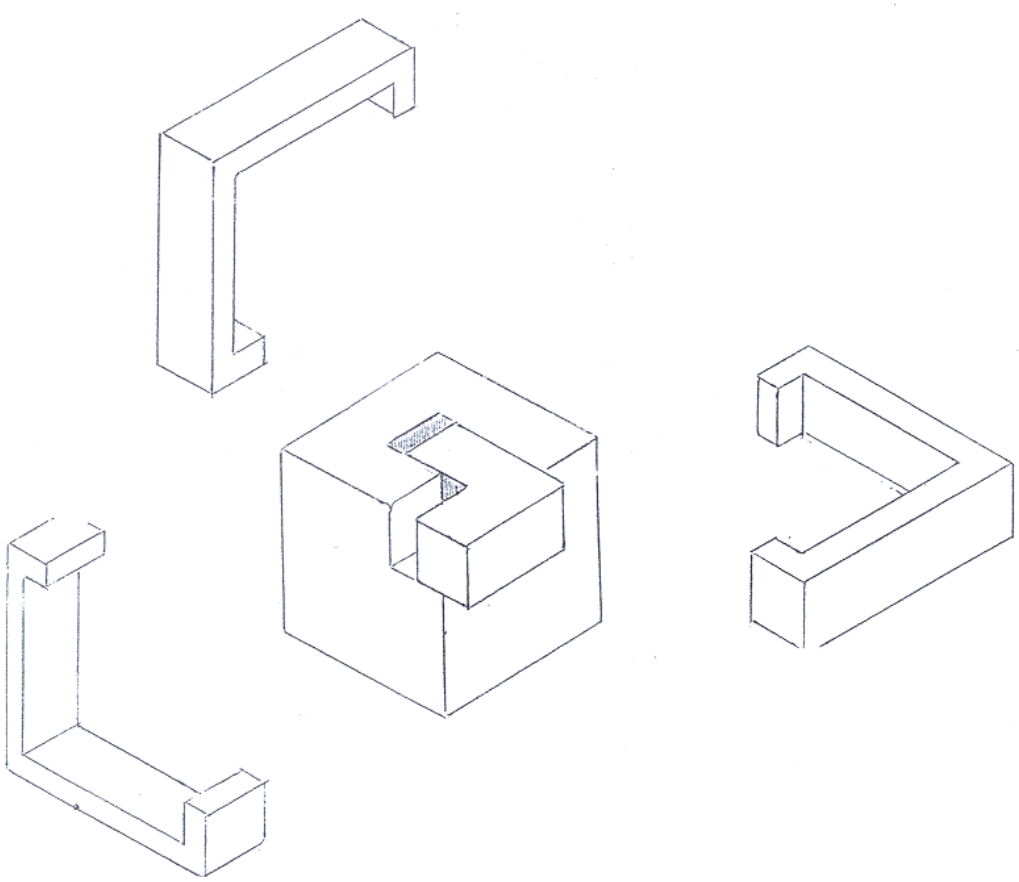
# 20 In Brackets

**Puzzle Solution**:

Look for half cube showing at end of each bracket. One will push in (use matchstick if finger doesn't work). Make sure nearby bracket is slid to the right so 2 cubes can make an exit on other side. Have the exiting cubes facing you at top of puzzle.

3rd bracket across top of puzzle moves (with some cubes) to the left.

Brackets plus 3 shapes then come apart.



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**21**

# Integrity

**Puzzle Goal:** **Disassemble and reassemble.**

**Materials:** Maple and mahogany

**Classification:** Interlocking burr

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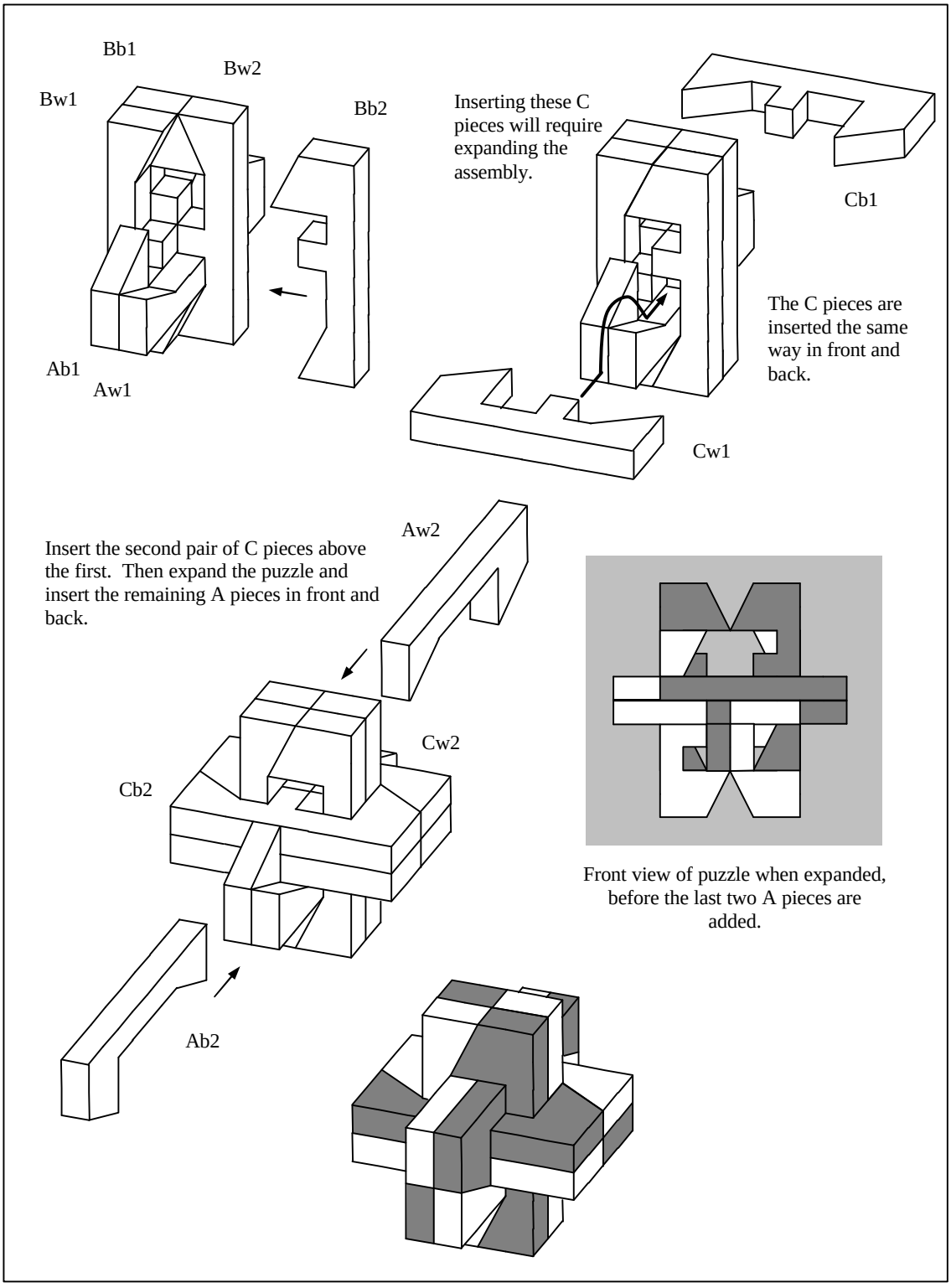
# 21 Integrity

**Puzzle Solution**:






Front view of puzzle when expanded, before the last two A pieces are added.

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# 22 Intersecting Truncated Tetrahedra

**Puzzle Goal:** **To dismantle and re-assemble the puzzle.**

**Materials:** American oak, pine

**Classification:** Interlocking solid

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# 22 Intersecting Truncated Tetrahedra

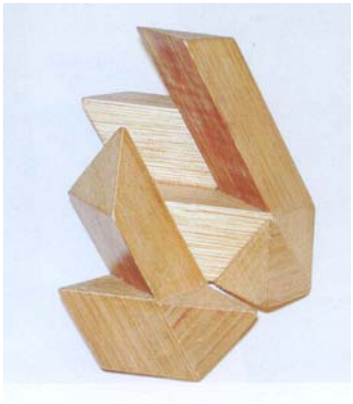
**Puzzle Solution**:

1

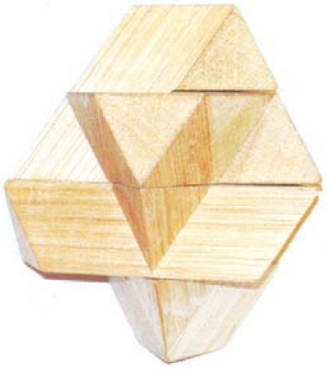
2

3

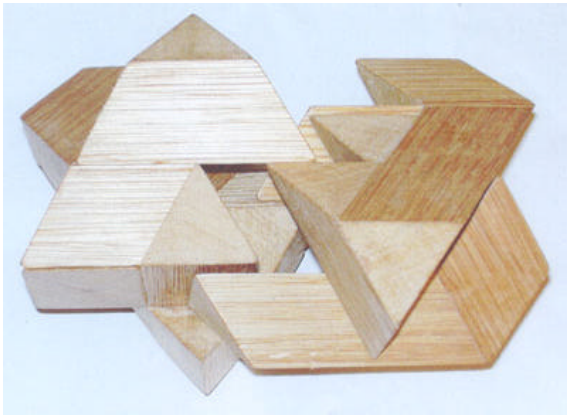
4



Slide together pieces 1 and 2.:



Slide together pieces 3 and 4.



Then slide together pieces (1,2) and (3,4).

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**23**

# Jigsaw Ring

**Puzzle Goal:** **To remove the three jigsaw pieces from the ring.**

**Materials:** Sterling silver

**Classification:** Take-apart

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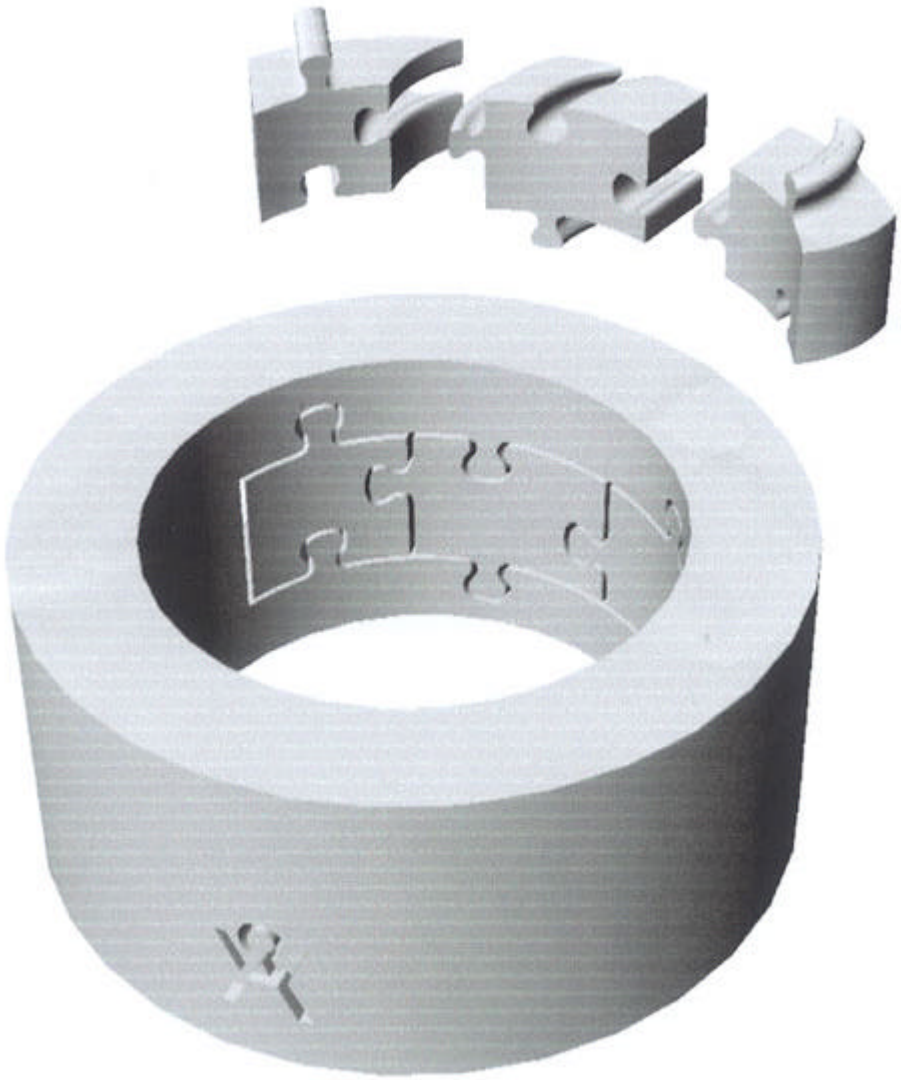
# 23 Jigsaw Ring

**Puzzle Solution**:

Two of the pieces will come out together in a rotational move (you push one side inwards and the other will slide up).



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**24**

# Jukebox

**Puzzle Goal:** **Continue inserting disk in such an order that the red disks end up in the red tray at the left and the green disks end up in the green tray at the right. Notice the 2:1 switches. They only flip after inserting a second disk.**

**Materials:** Laser-cut walnut wood, cast tin, acrylic window, metal bolts, red and green felt

**Classification:** Sequential Movement

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# 24 Jukebox

**Puzzle Solution**:

1: Insert a series of uncolored disks into the slot at the top of the Jukebox.

2: Watch them sliding right and left through the switches and ending up in the red and green trays.

3: Color those disks red that ended up in the red tray. Color those disks green that ended up in the green tray.

4: Reverse time.

5: Catch the coins when the pop up from the slot at the top of the Jukebox.

6: Reverse time again.

7: Watch the disks entering the Jukebox, sliding right and left through the switches and ending up in the trays matching with their colors.

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**25**

# LES-Board-um

**Puzzle Goal:** **Put together the two-sided checkerboard.**

**Materials:** Brass, Plexiglas

**Classification:** 3D Assembly

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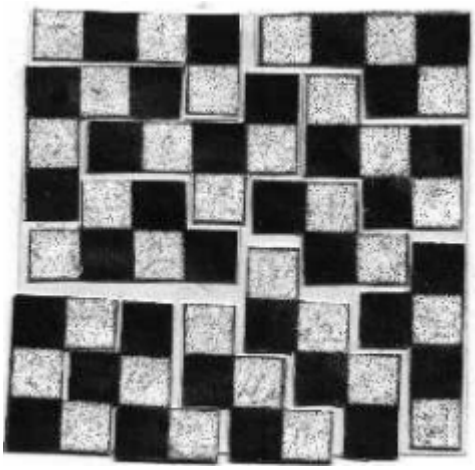
**25**

# LES-Board-um

**Puzzle Solution**:



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**26**

# Love Secret

**Puzzle Goal:** **Remove the rope ring from the heart.**

**Materials:** Stainless steel, rope

**Classification:** Disentanglement

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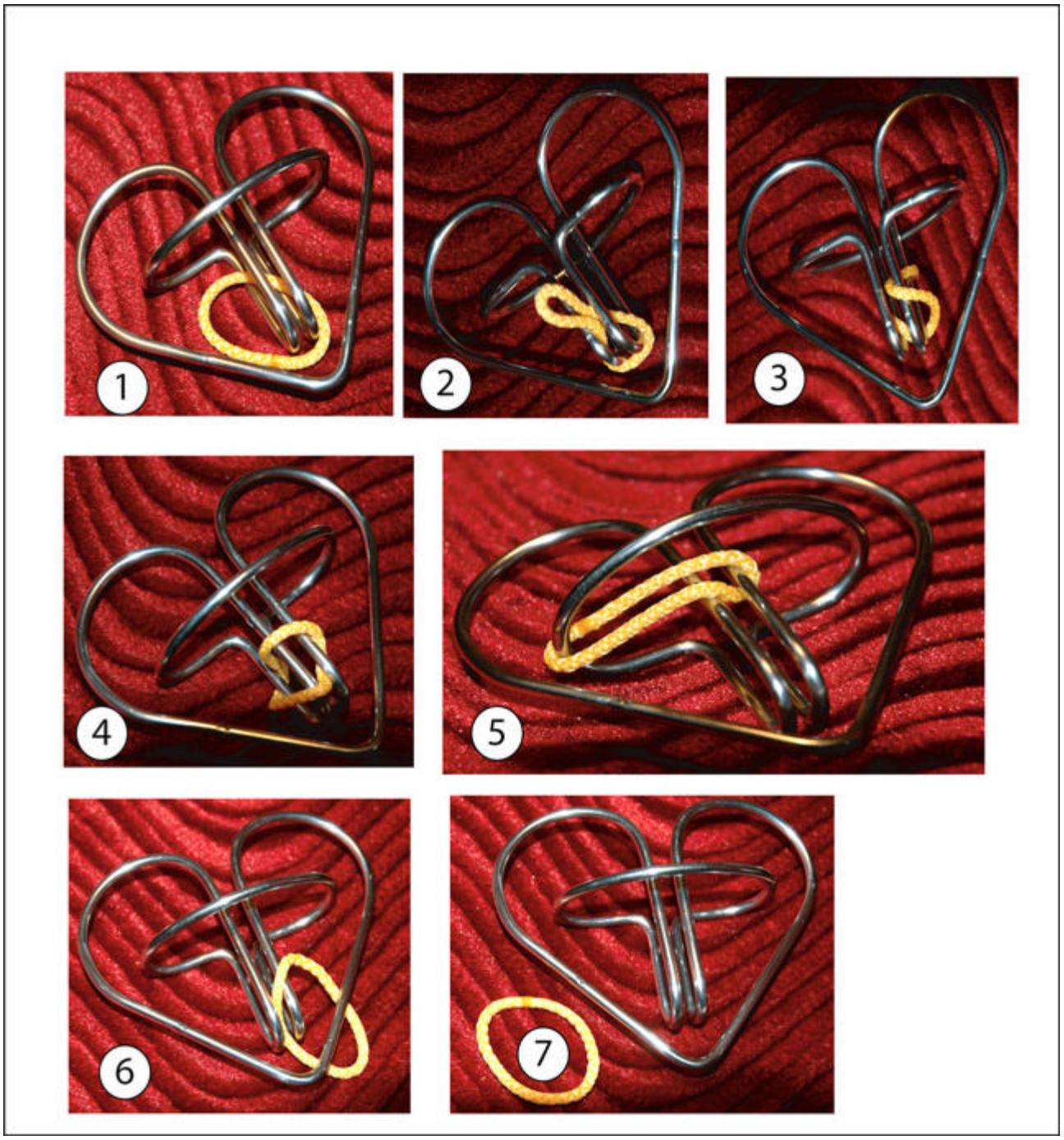
# 26 Love Secret

**Puzzle Solution**:

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**27**

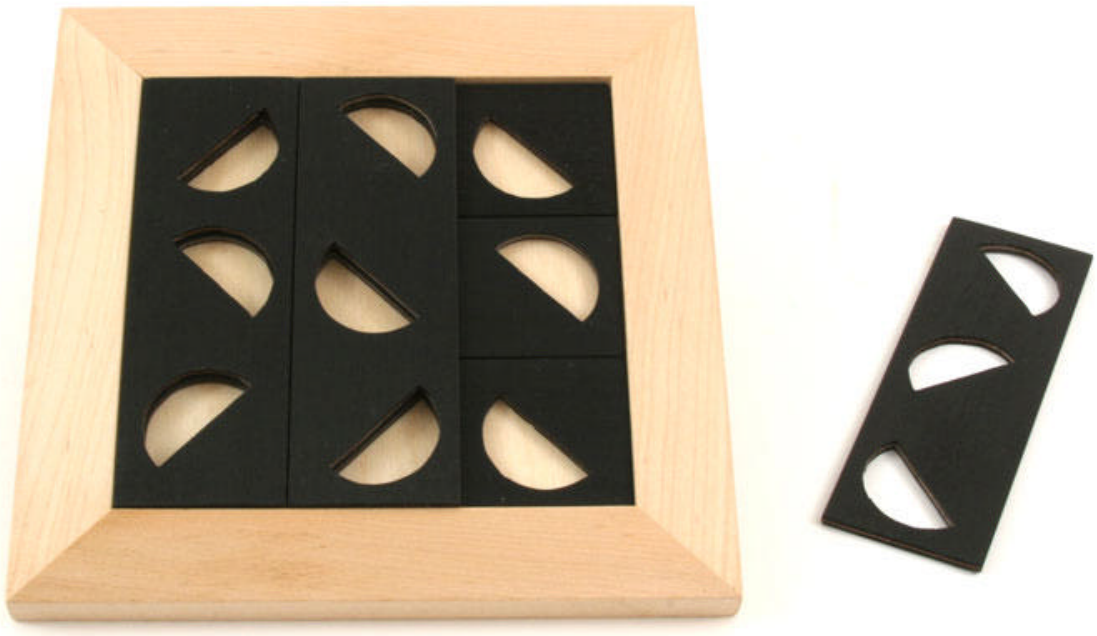
# Nine Halves

**Puzzle Goal:** **1. Put the pieces in the tray so you have all nine halves closed and you do not see the bottom.**

**2. Put the pieces in the box so you have all nine halves open.**

**Materials:** Maple and plywood

**Classification:** Put-together



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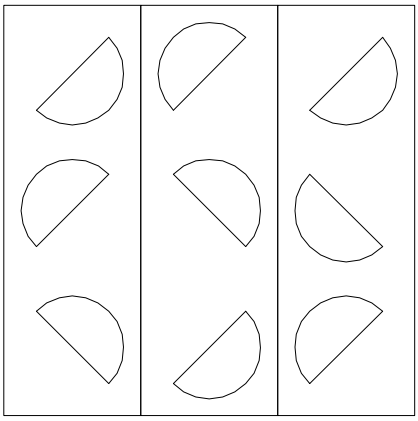
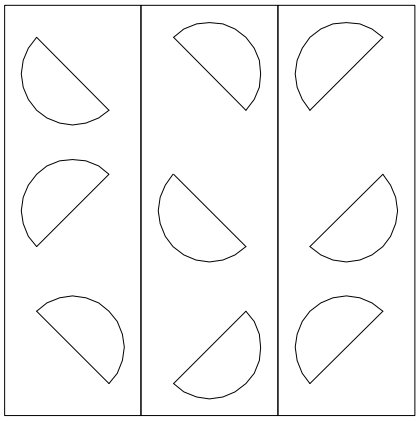
# 27 Nine Halves

**Puzzle Solution**:



Solution closed



Solution open

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**28**

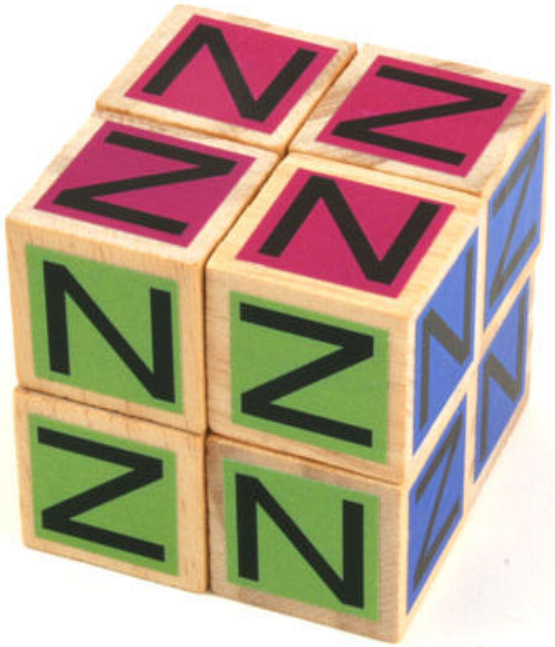
# NZanity

**Puzzle Goal:** **1. Make a cube with each face a different color, and NZ appearing face up in the top row on all six faces.**

**2. Make a cube with four colors on each face, the with the NZs in the same arrangement as 1.**

**Materials:** Wood

**Classification:** Misc. Put-together



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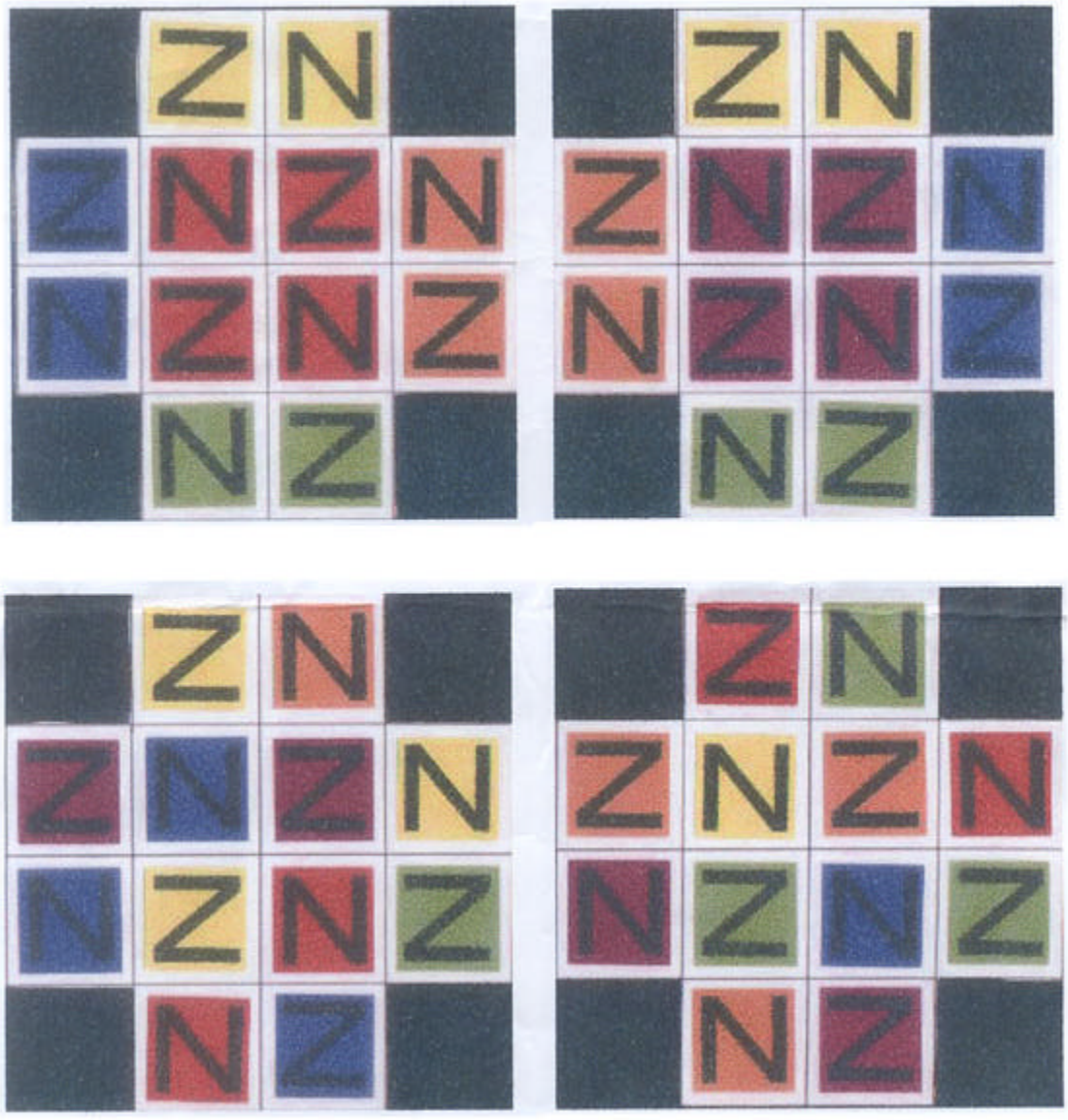
# NZanity

**Puzzle Solution**:

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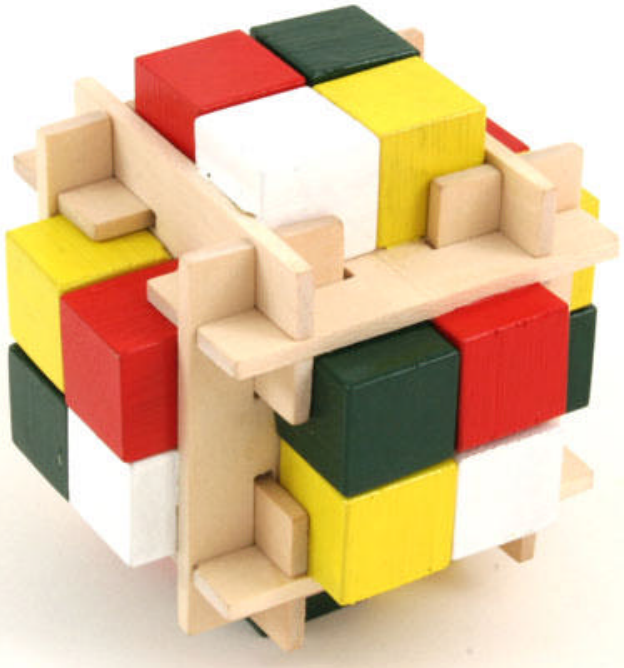
**29**

# Orthogenesis

**Puzzle Goal:** **The object is to assemble the pieces into a cube so that each face contains one block of each color.**

**Materials:** Painted wood

**Classification:** 3D Assembly



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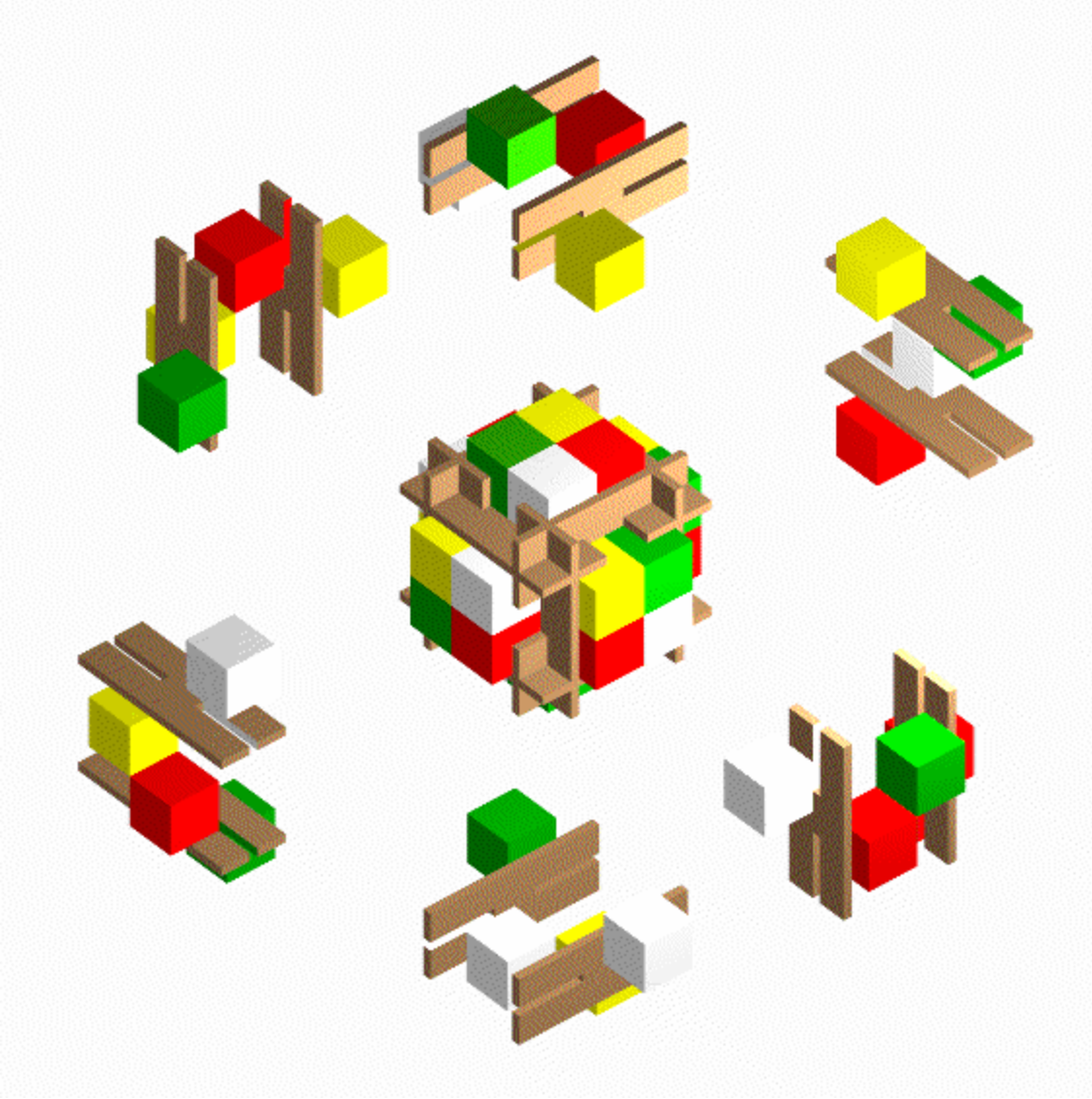
# 29 Orthogenesis

**Puzzle Solution**:



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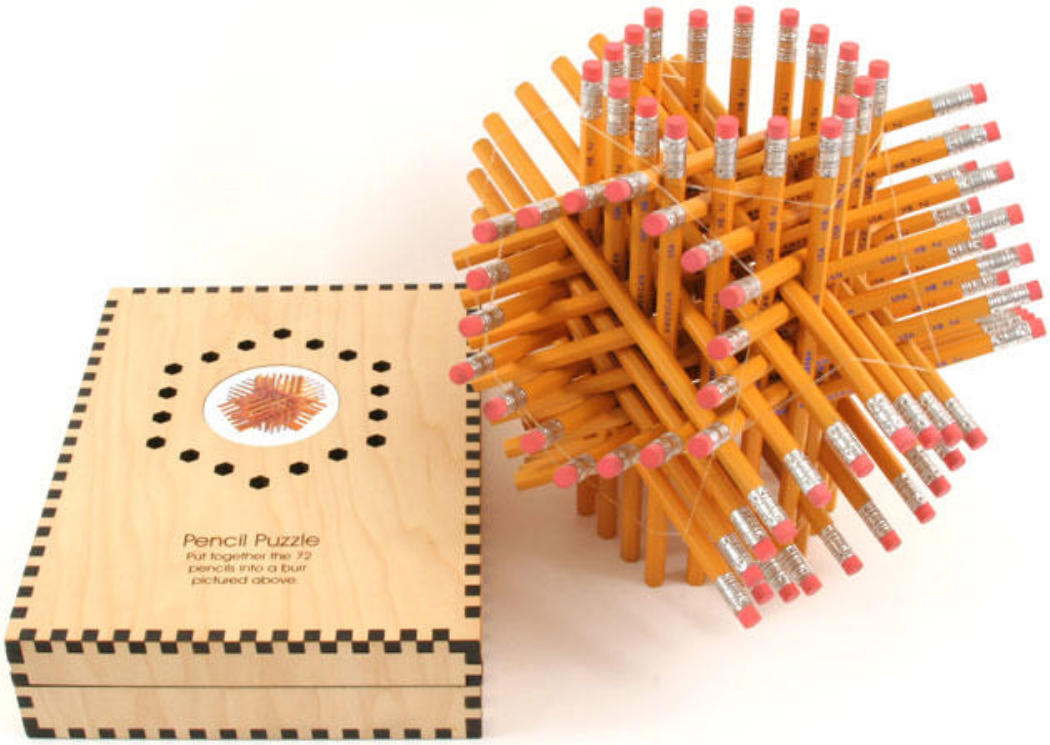
**30**

# Pencil Puzzle

**Puzzle Goal:** **Assemble the pencil arrangement shown.**

**Materials:** 72 pencils and rubber bands

**Classification:** 3D Assembly

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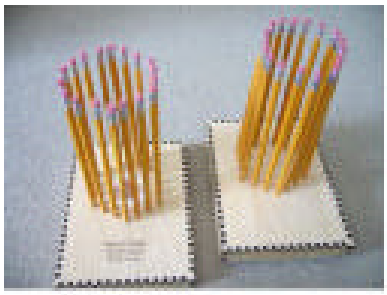
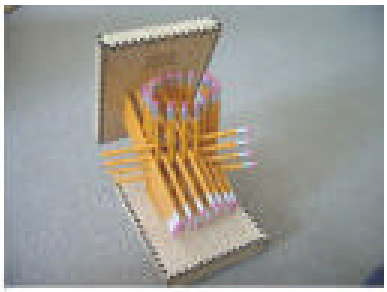
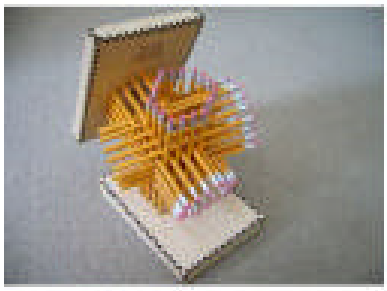
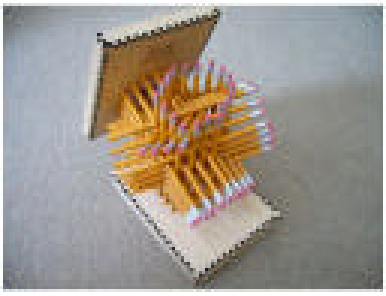
# 30 Pencil Puzzle

**Puzzle Solution**:

The solution is to use the top and bottom parts of the box. Each box part can hold an array of 18 pencils. Put the clear rubber bands around the bottom of each array. These two arrays are pushed together and the clear rubber bands are now placed at the ends of each array. There is enough stability to insert a new axis of pencils into the mesh. After the third axis is pushed into place, put the clear rubber bands on the ends. Finally, insert the last axis of pencils and bind them with the remaining two clear rubber bands. The pencil puzzle can now be disengaged from the box parts.



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**31**

# Pentangular Jam

**Puzzle Goal:** **From the starting position (shown), slide the pieces so that the colored piece can exit the tray through the slot in the front of the tray.**

**Materials:** Wood and MDF

**Classification:** Sequential Movement

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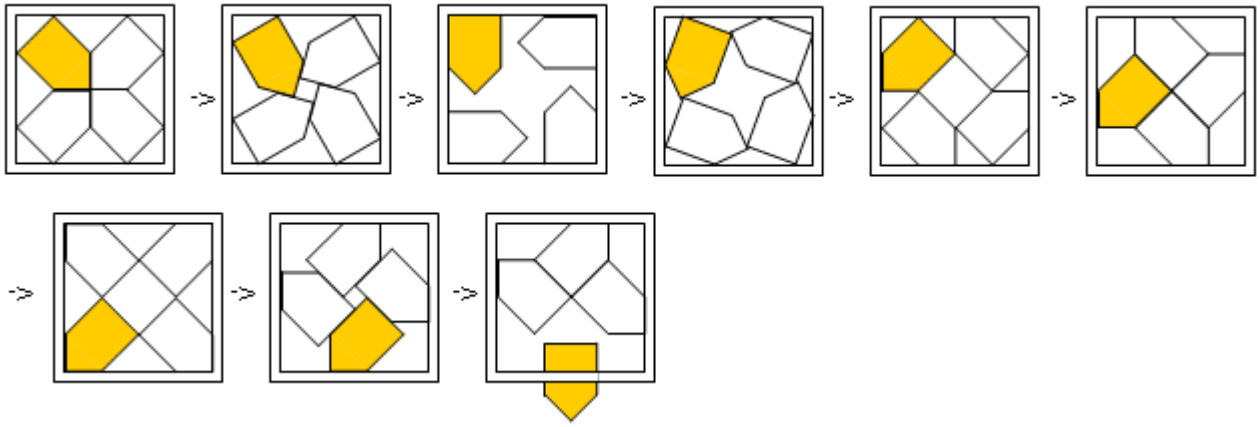
# 31 Pentangular Jam

**Puzzle Solution**:



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**32**

# Polymorphic 12

**Puzzle Goal:** **Put the pieces in the tray so that 12 different colors are visible.**

**Materials:** Painted wood

**Classification:** 2D Assembly

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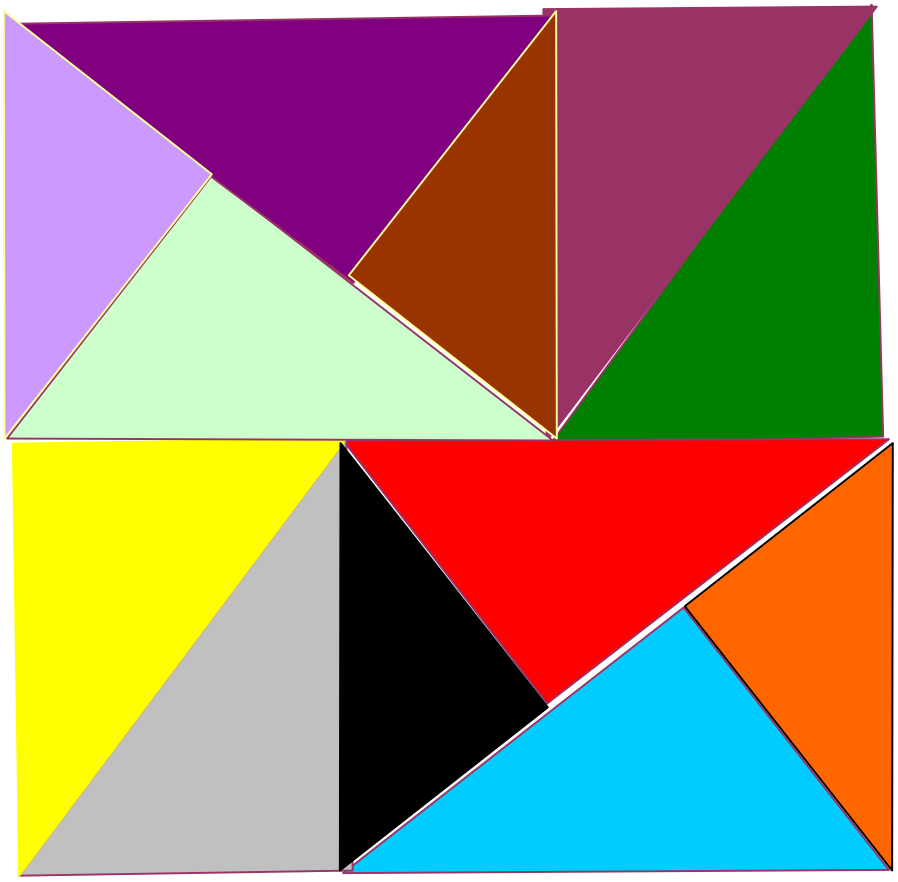
# 32 Polymorphic 12

**Puzzle Solution**:



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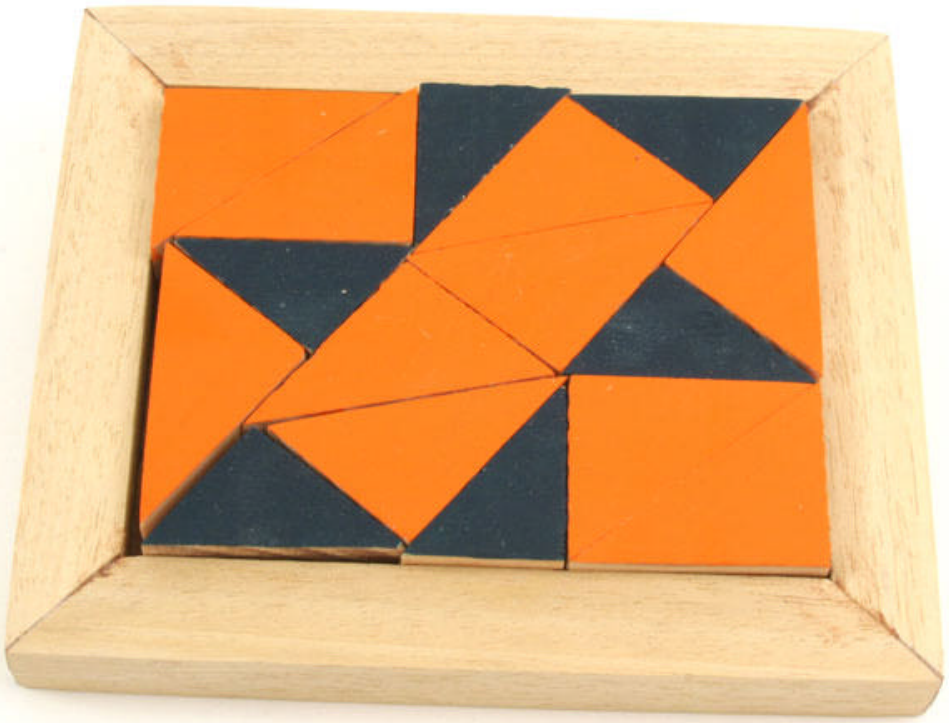
**33**

# Polymorphic 16

**Puzzle Goal:** **Find all the arrangements of the 16 pieces (10 orange and 6 blue) that will fit in the tray.**

**Materials:** Painted wood

**Classification:** 2D Assembly



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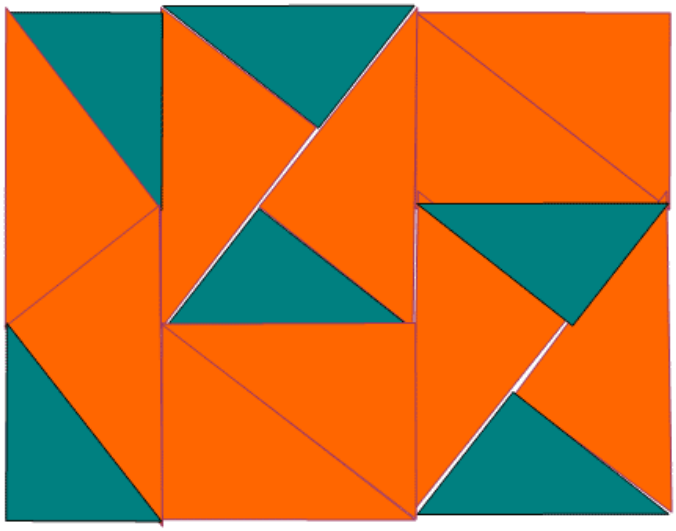
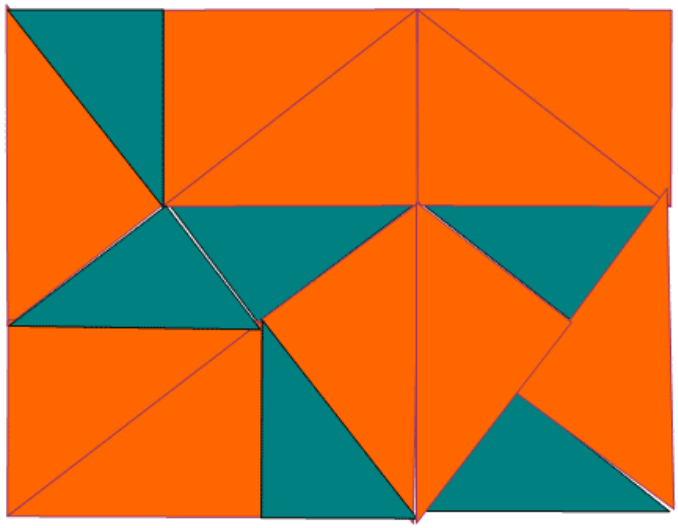
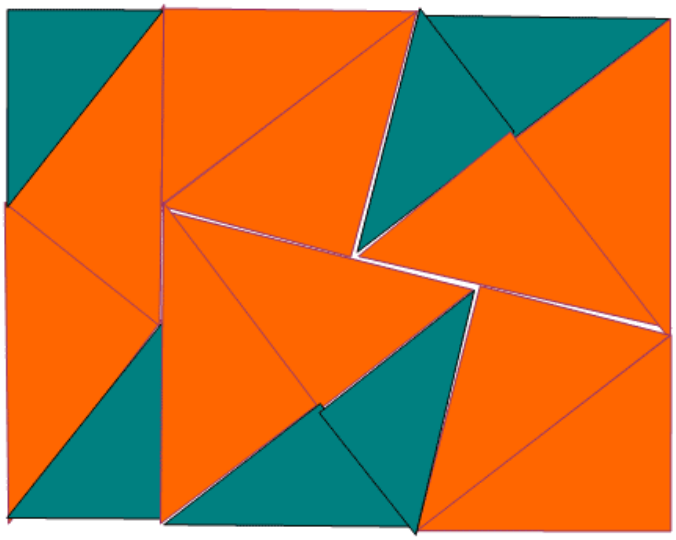
# 33 Polymorphic 16

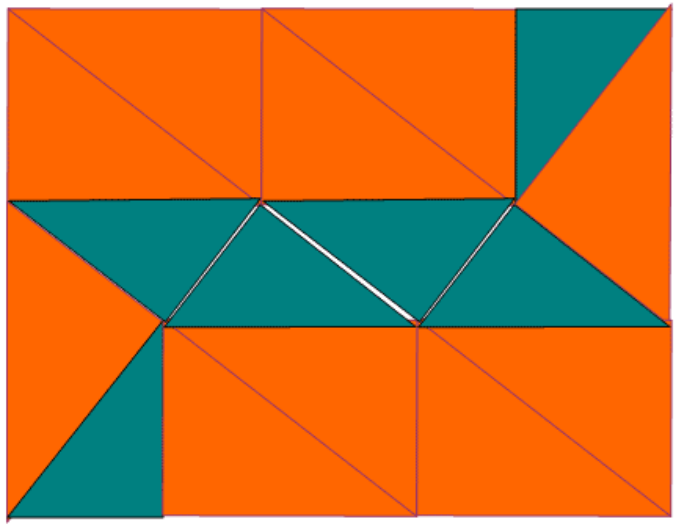
**Puzzle Solution**:

Many arrangements are possible. Here are some sample arrangements.









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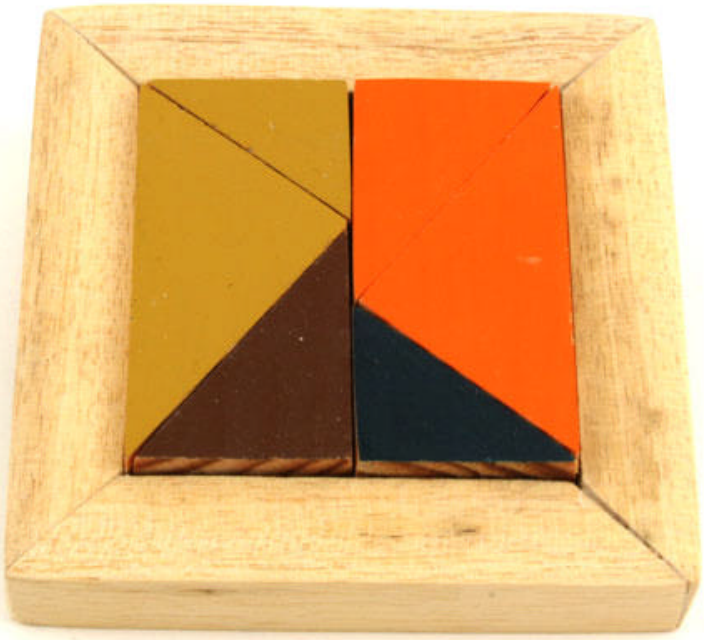
**34**

# Polymorphic 6

**Puzzle Goal:** **Put the pieces in the tray so that 6 different colors are shown.**

**Materials:** Painted wood

**Classification:** 2D Assembly



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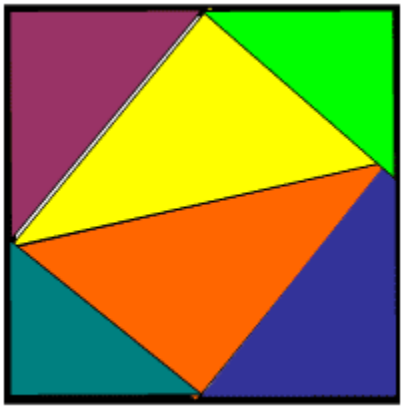
# 34 Polymorphic 6

**Puzzle Solution**:



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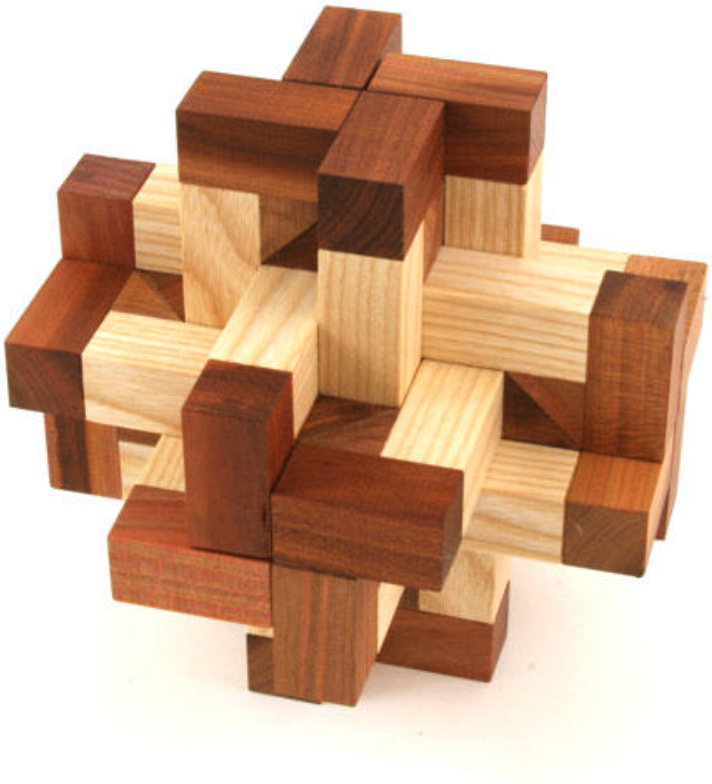
**35**

# Procross

**Puzzle Goal:** **Take apart and put together.**

**Materials:** maple, plum

**Classification:** Interlocking solid



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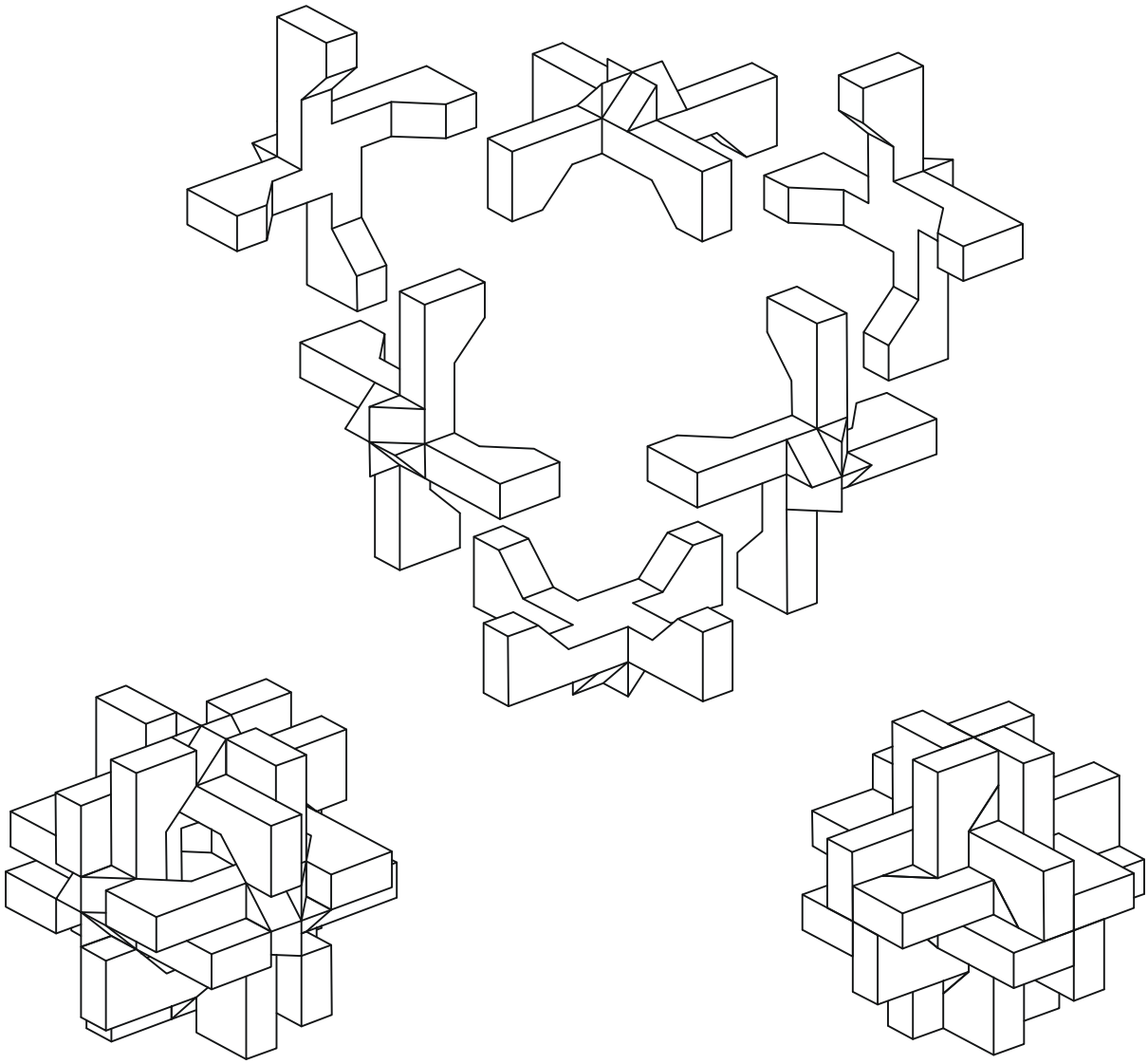
**35**

# Procross

**Puzzle Solution**:



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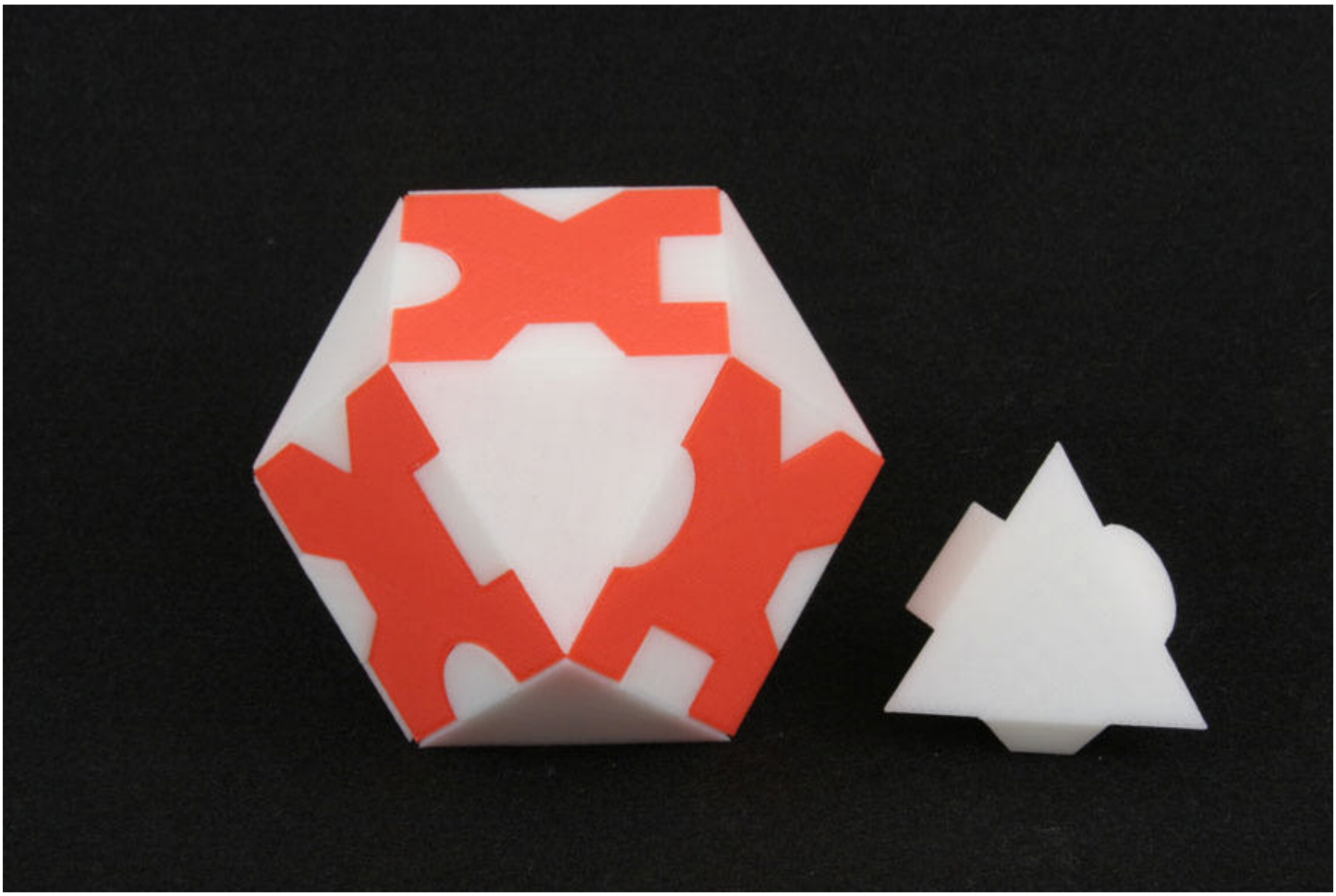
# 36 Pyramid Power

**Puzzle Goal:** **Take apart and then put together.**

**Materials:** ABS, steel and NdFeB magnet

**Classification:** Edge-matching

**Notes:** Using four edge patterns no more than once, there are 6 possible squares and 8 possible triangles. The pieces of this puzzle use each of these patterns.



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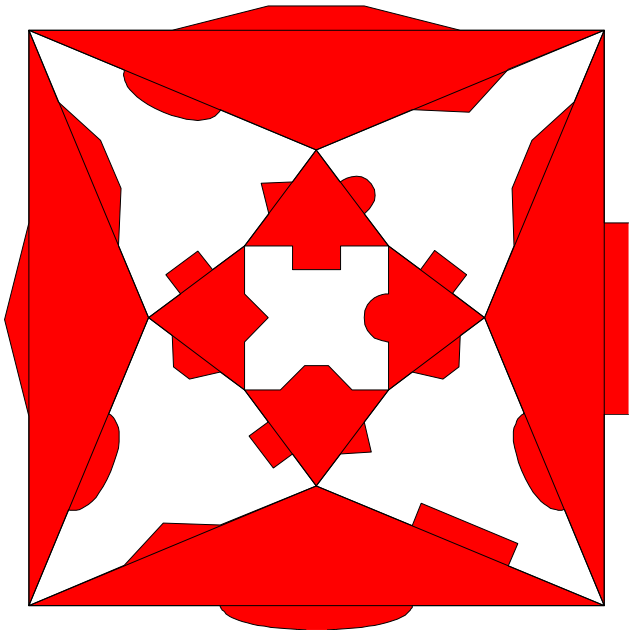
# 36 Pyramid Power

**Puzzle Solution**:



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**37**

# Rescube

**Puzzle Goal:** **Release the inside shape from the cube.**

**Materials:** Pine and plywood

**Classification:** Sequential movement

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# 37 Rescube

**Puzzle Solution**:

- Loosen inner cube.
- Box resembles a mouth with one tooth. Have it facing you with tooth at top.
- Note small cube can tip towards you/away from you.
- It can roll clockwise & anti-clockwise.
- It can't move "roundabout" fashion.
- Use above moves to align "tooth" with correct gap in inner cube.(One position is false ).
- Pull inner cube outwards as far as possible.
- Turn small cube anti-clockwise.
- Small cube moves vertically.
- Turn small cube 180 degrees.
- It will exit from top of large cube.
- Reverse above moves to replace cube in box.

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**38**

# Sequential Star

**Puzzle Goal:** **Disassemble and reassemble.**

**Materials:** Bois de rose, verawood, narrah, steel pins

**Classification:** Interlocking soli

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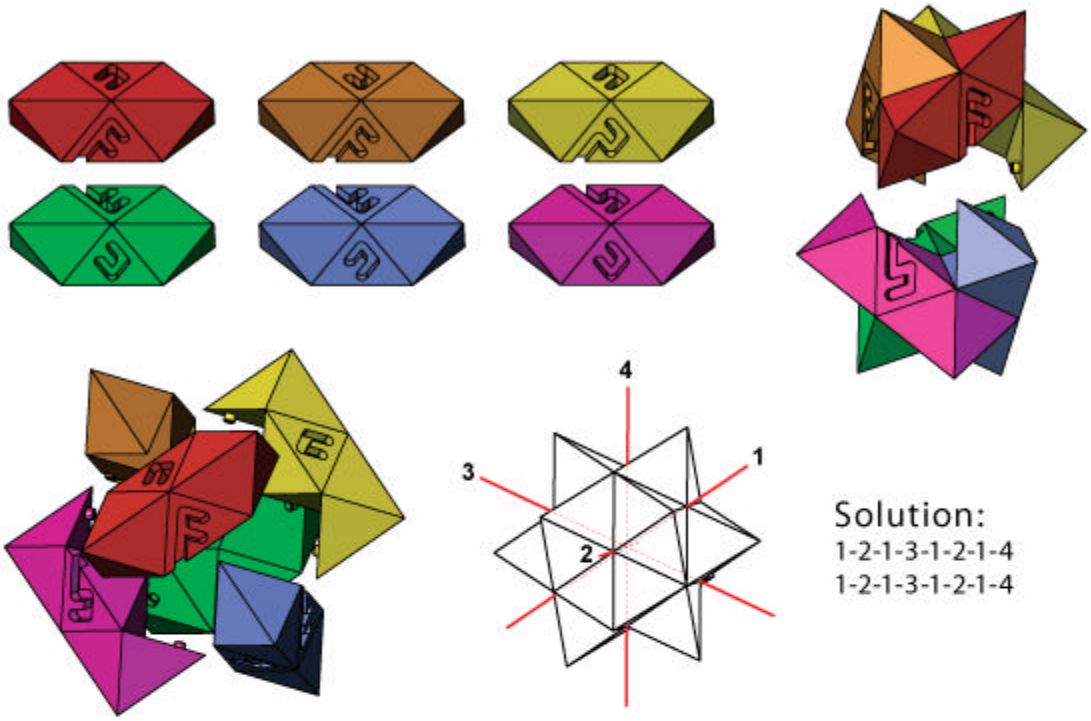
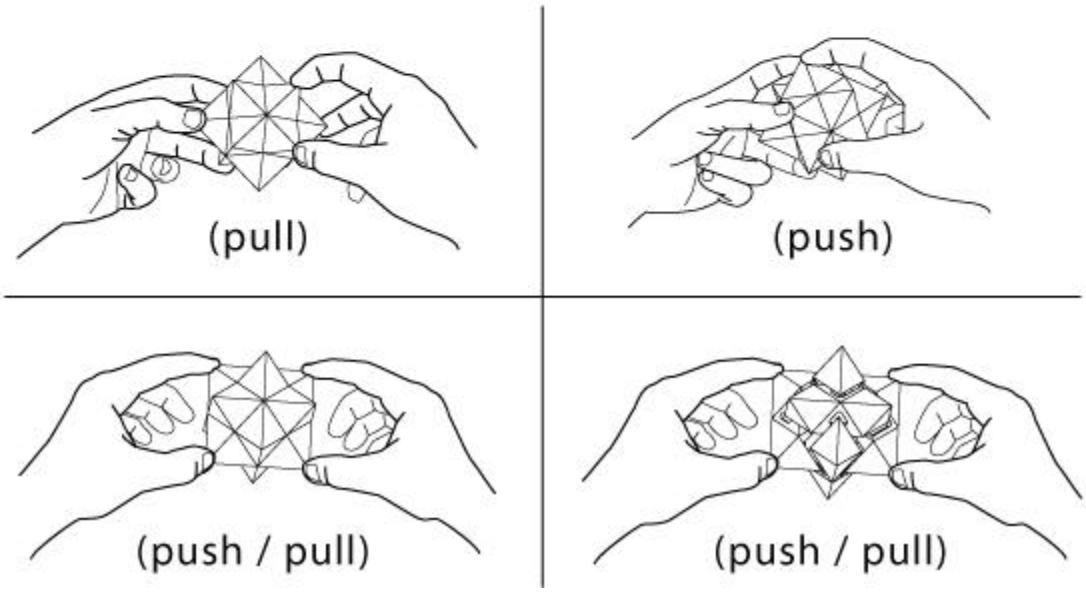
# 38 Sequential Star

**Puzzle Solution**:



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**39**

# Simple Three Piece Burr

**Puzzle Goal:** **Assemble three pieces into an interlocking burr. Absolutely NO FORCE is required.**

**Materials:** Cherry wood

**Classification:** Interlocking burr

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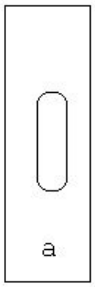
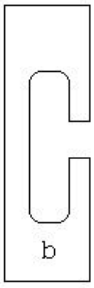
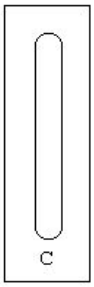
# 39 Simple Three Piece Burr

**Puzzle Solution**:

## "Simple 3 piece burr" solution

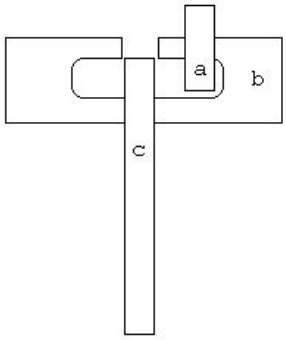



Note that the slot in 'a' is not centered on the piece, the gap in piece 'b' is non symetrical, and the slot in piece 'c' is nearer the one end than the other. This is deliberate and not due to bad workmanship!

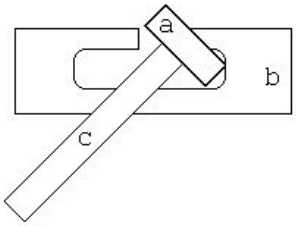
step1




Piece a should rotate so that it fits through the slot in b without any force.

Piece c should just fit under the arms on piece b.

step2




Piece a should now rotate over the top of piece C. This should be a snug fit, but does not require any force. If it is too tight try reversing either piece a or swapping sides on piece b. Once completed the burr should be interlocking, although loose.

***No excessive force is required to solve the puzzle***

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**40**

# Sliding Bar Puzzle Box

**Puzzle Goal:** **Open the box by operating the box's locking mechanism and sliding open the box.**

**Materials:** Purpleheart, walnut, padauk, yellowheart, cocobolo

**Classification:** Trick-opening

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# 40 Sliding Bar Puzzle Box

**Puzzle Solution**:

1. With the box held upright, move each of the eight sliding bars side to side until notches on their undersides aligns with one of the two locking bars.

2. Lift the locking bar up into the notches on the sliding bars, and remove from the box completely.

3. Repeat steps 1-2 for the other locking bar.

4. Open the box by lifting the purple door vertically out of the box.

Note: When replacing the door to the box, make sure that the tapered lower edge faces toward the sliding bars. This helps prevent the door from catching as it slides down into place.

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**41**

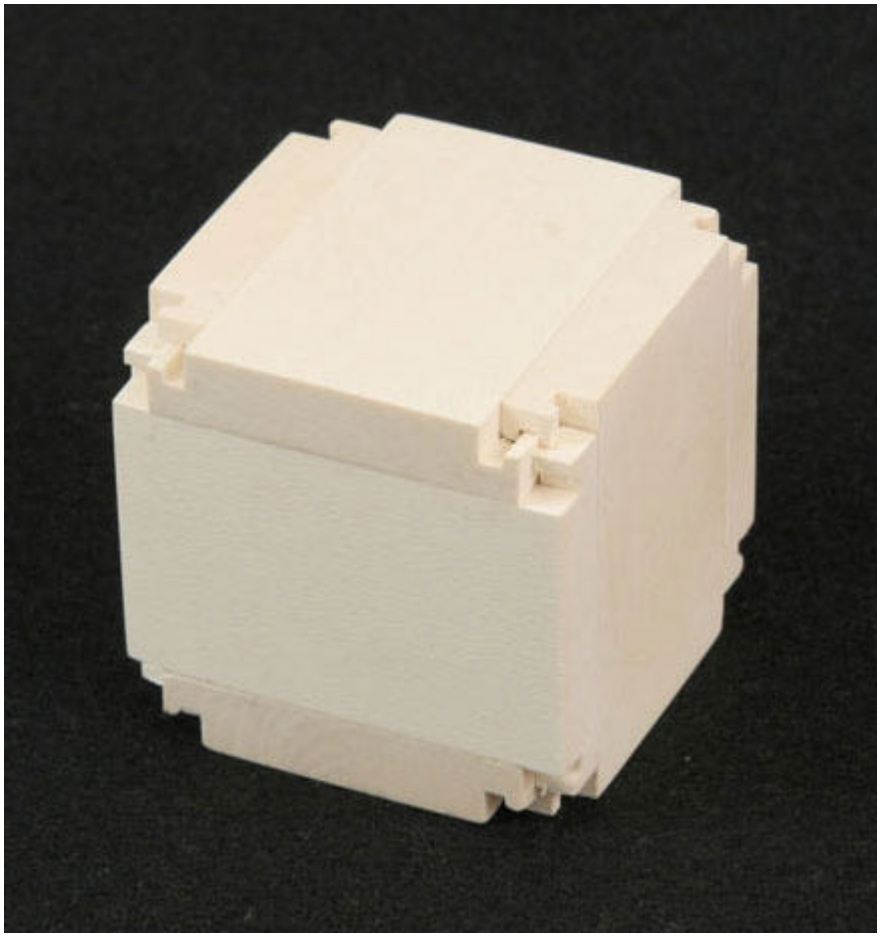
# Snowflake

**Puzzle Goal:** **Open the box through seven sequential steps.**

**As a secondary goal once the box is open, the entire box can be dismantled into its 6 individual pieces and reassembled back into a working puzzle box.**

**Materials:** Holly

**Classification:** Take-Apart



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# 41 Snowflake

**Puzzle Solution**:

Each time a panel moves, it releases another panel so that it can also move. Continue moving panels until the internal compartment of the box is revealed. Removing the last panel entirely allows the puzzle to come apart into 6 pieces. Reassembling the puzzle pieces can be challenging, and it only goes together one way. Place the only two puzzle pieces that are identical opposite from each other, and through trial and error attach them together with the 4 pieces that remain.

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**42**

# Soleilla

**Puzzle Goal:** **Put the 5 identical pieces together to form a cylinder (sun) with 10 edges.**

**Materials:** Wood

**Classification:** 3D Assembly

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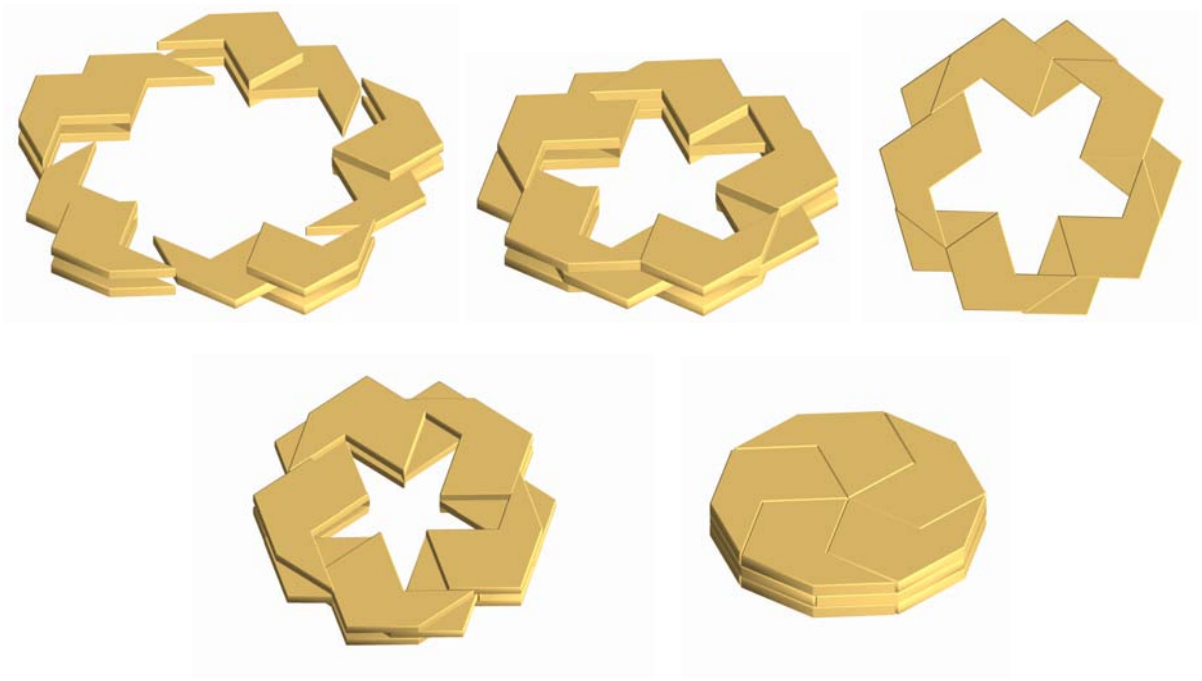
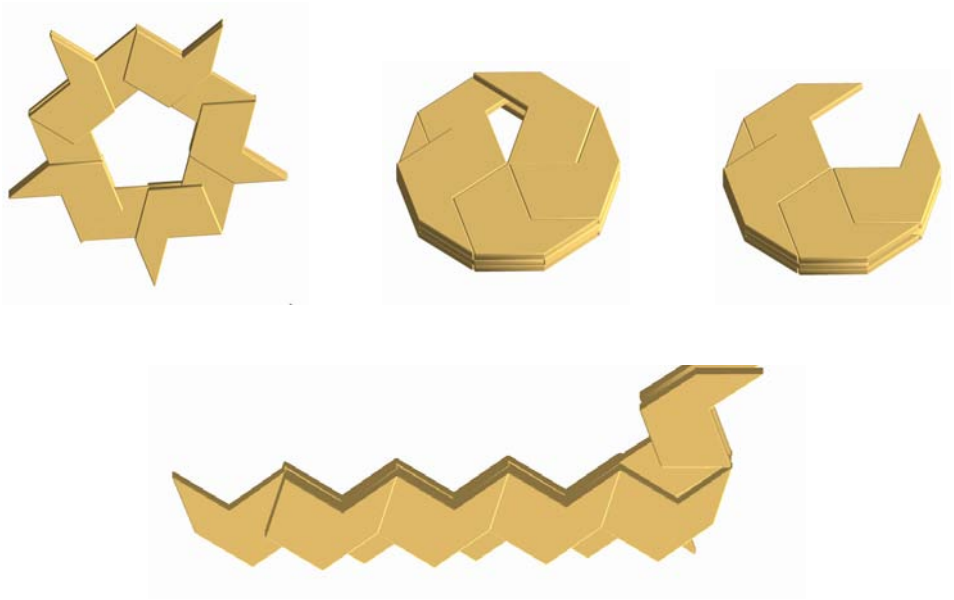
# 42 Soleilla

**Puzzle Solution**:



Other compositions are possible:



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**43**

# Square Dissection

**Puzzle Goal:** **The puzzle is a wooden square, dissected into five pieces. The problem is to take the pieces apart, without breakage and then to re-assemble.**

**Materials:** Wood

**Classification:** Dissection/Interlocking

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# 43 Square Dissection

**Puzzle Solution**:

The appearance of the puzzle, as a “Square dissection” is, of course, misleading. Since, if all the pieces were planar - symmetric in the vertical dimension, they would slide apart vertically, without any intersecting pieces affecting disassembly. The square dissection is simply a red herring to the solution, which consists of turning the central piece to unlock the others.

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**44**

# Square Ring

**Puzzle Goal:** **To disassemble the ring, and reassemble.**

**Materials:** Sterling silver

**Classification:** Take-apart

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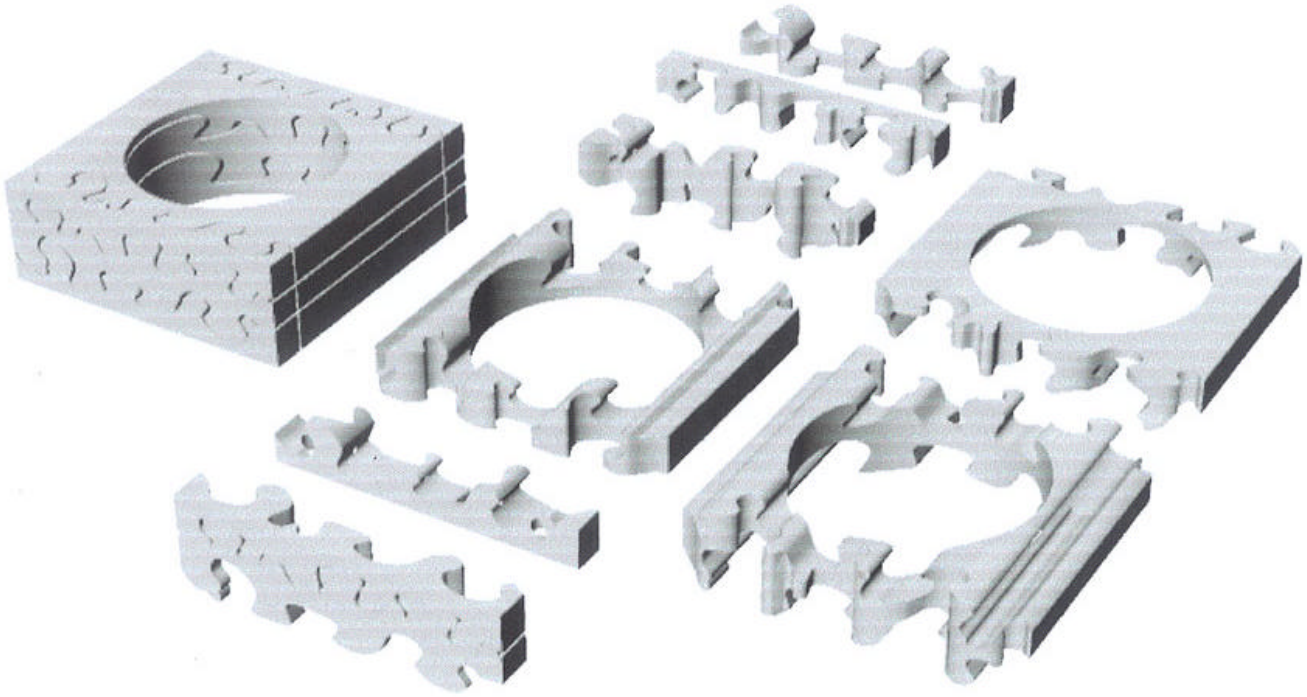
# 44 Square Ring

**Puzzle Solution**:

Pieces are sliding one on the other. You will need to find te right order.



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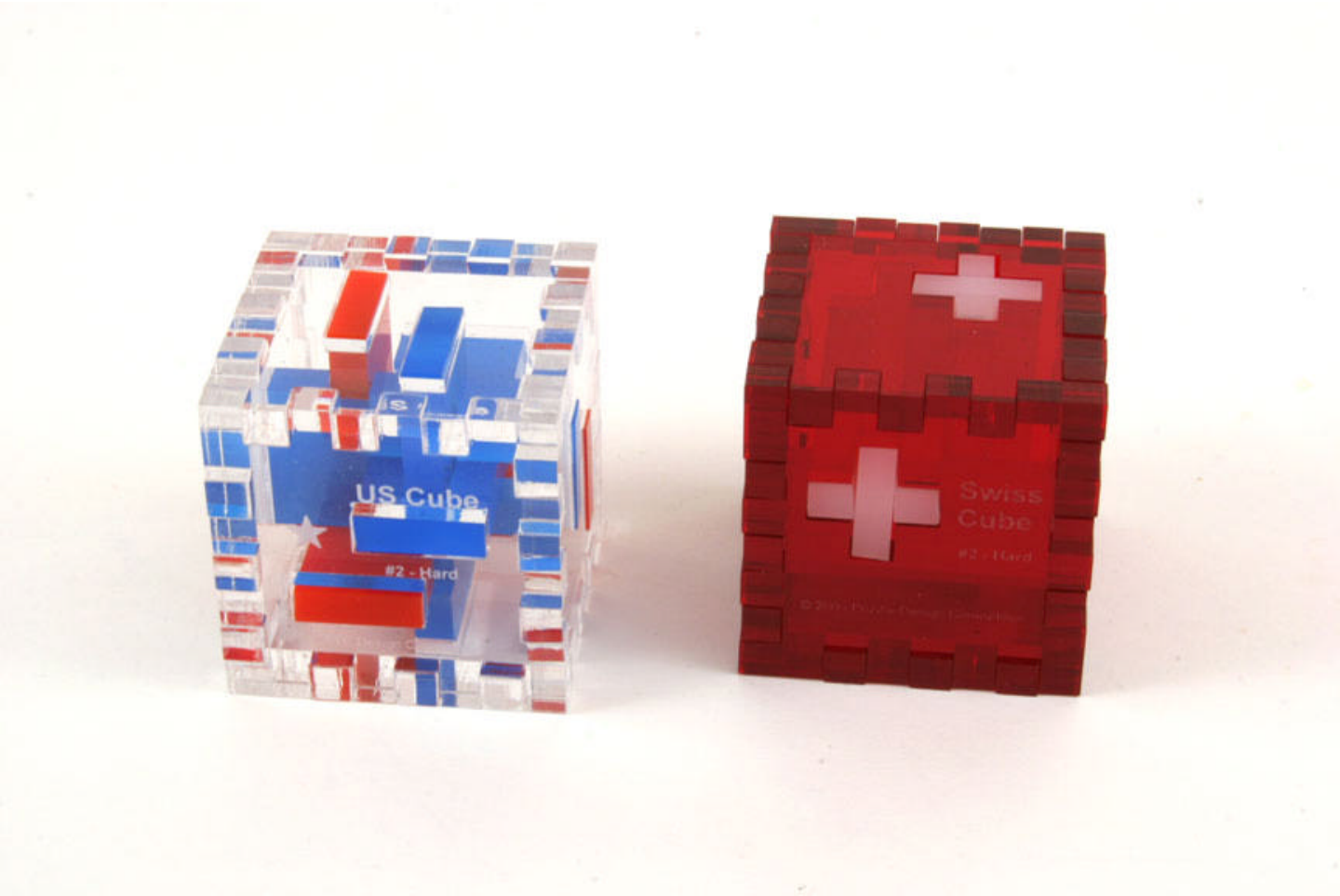
# 45 Swiss and US Cubes

**Puzzle Goal:** **The objective of the Swiss Cube is to remove the three Swiss cross pieces. For the US Cube it is to remove the blue and red pieces. Then put them all back into the cubes.**

**Note: Don't try to take the cubes apart**

**Materials:** Acrylic

**Classification:** Framed Burr

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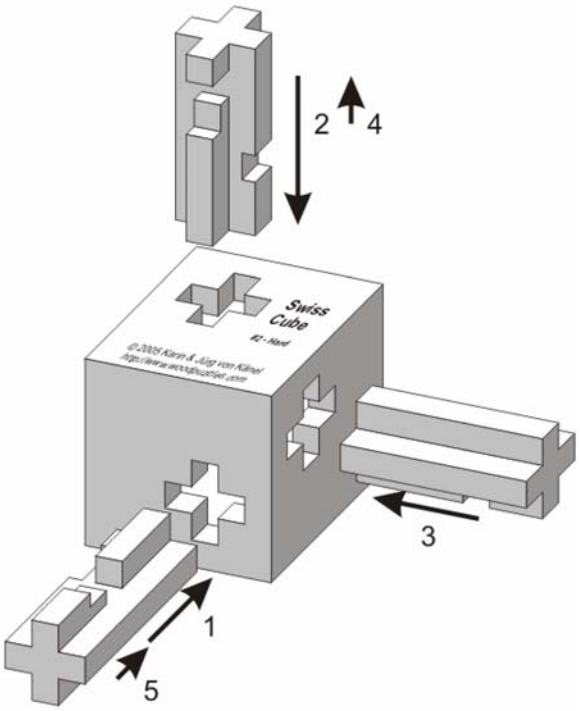
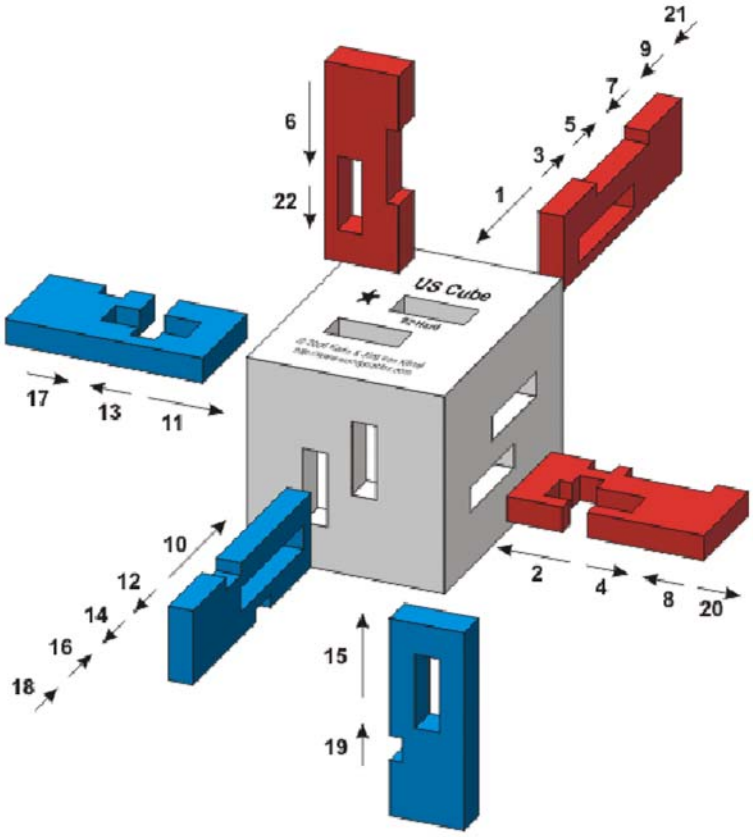
# 45 Swiss and US Cubes

**Puzzle Solution**:

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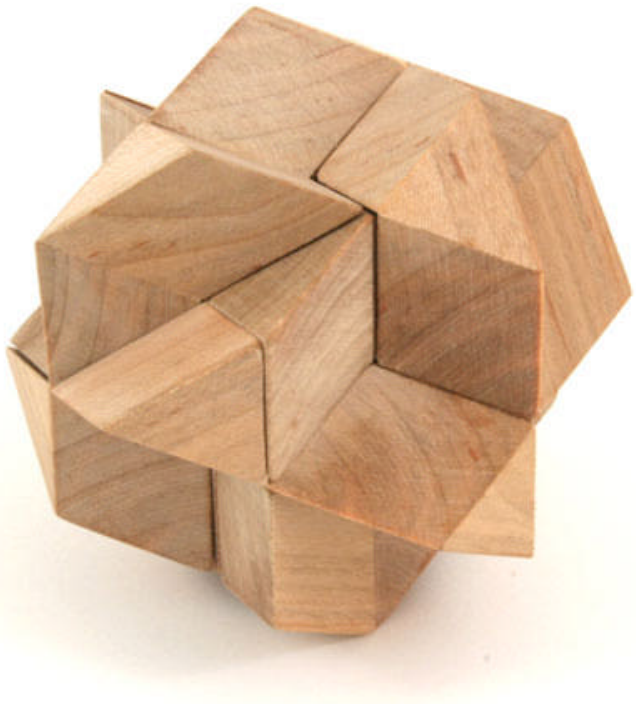
**46**

# The Hill

**Puzzle Goal:** **Assembly the six pieces to form the polyhedral solid.**

**Materials:** Maple

**Classification:** Interlocking Solid



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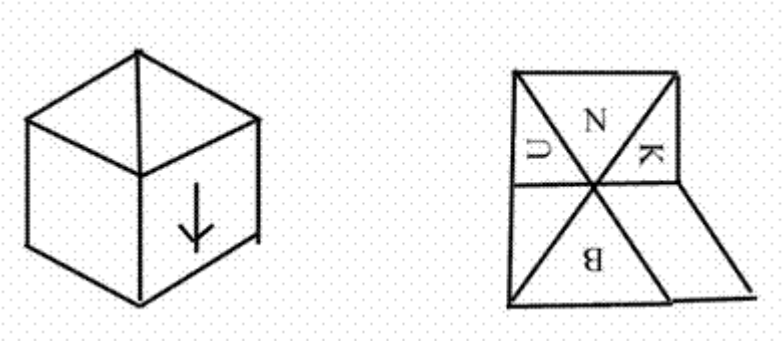
# 46 The Hill

**Puzzle Solution**:




The diagram on the left is an aid to finding the first step of disassembly. Note that only one of the 24 rhombic faces is divided. The arrow indicates the direction of motion to remove the key piece.

To assemble, note that the pieces are labeled B-U-N-K-E-R (as in the hill!) in order of assembly. First assemble BUN in an interlocking nest of three. Then carefully separate them just enough to insert piece K, and close together. Then insert pieces E and R.

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**47**

# The Maze Burr

**Puzzle Goal:** **Solve the sequence to open up the Maze Burr, take it apart, and re-assemble it.**

**Materials:** Ebony, Cylon, Satinwood, Maple

**Classification:** Take apart

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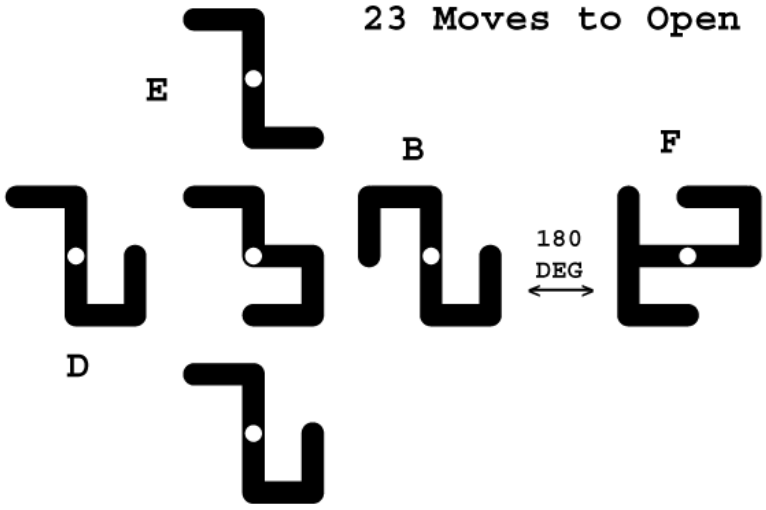
# 47 The Maze Burr

**Puzzle Solution**:

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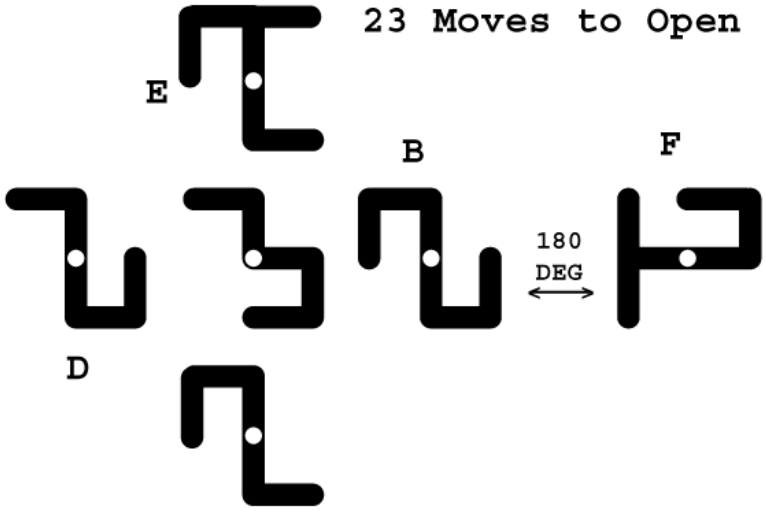
CB, DC, DF, DE, CD, CF, AC, AD, AC, AD, 2AC

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CB, DC, DF, DE, CD, CF, AC, AD, AC, AD, 2AC

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**48**

# The Trouble With U

**Puzzle Goal:** **Remove the pieces and construct various shapes: a 4x4x4 cube, a 5x5x2 prism, an 8x4x2 prism, and a 7x4x2 prism.**

**Materials:** Exotic hardwood: pink ivory, kingwood, tulipwood, bois de rose, Macassar ebony, Ziricote, Chakte Viga, cocobolo, figured Tasmanian blackwood, African blackwood

**Classification:** 3D Assembly

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# 48 The Trouble With U

**Puzzle Solution**:

Top Layer

| | | | | |
|---|---|---|---|---|
| 4 | 8 | 4 | 6 | 6 |
| 4 | 4 | 4 | 6 | 1 |
| 5 | 8 | 10 | 6 | 6 |
| 5 | 9 | 9 | 9 | 6 |
| 3 | 9 | 3 | 9 | 9 |

Bottom Layer

| | | | | |
|---|---|---|---|---|
| 4 | 8 | 8 | 1 | 1 |
| 4 | 8 | 8 | 1 | 1 |
| 5 | 8 | 5 | 1 | 1 |
| 5 | 5 | 5 | 3 | 6 |
| 3 | 3 | 3 | 3 | 9 |

Top Layer

| | | | |
|---|---|---|---|
| 1 | 1 | 3 | 3 |
| 8 | 10 | 5 | 5 |
| 8 | 8 | 5 | 5 |
| 8 | 8 | 6 | 6 |

Second Layer

| | | | |
|---|---|---|---|
| 1 | 1 | 2 | 3 |
| 8 | 1 | 2 | 5 |
| 9 | 4 | 9 | 9 |
| 8 | 4 | 6 | 9 |

Third Layer

| | | | |
|---|---|---|---|
| 1 | 1 | 3 | 3 |
| 7 | 2 | 2 | 5 |
| 9 | 9 | 9 | 5 |
| 7 | 4 | 6 | 6 |

Bottom Layer

| | | | |
|---|---|---|---|
| 7 | 7 | 2 | 3 |
| 7 | 2 | 2 | 3 |
| 7 | 4 | 4 | 6 |
| 7 | 4 | 4 | 6 |

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# 49 Three Totally Trapped Sages

**Puzzle Goal:** **Remove the three pieces from the cubic structure, and reassemble the cube.**

**Materials:** Walnut and canarywood

**Classification:** Interlocking, framed burr

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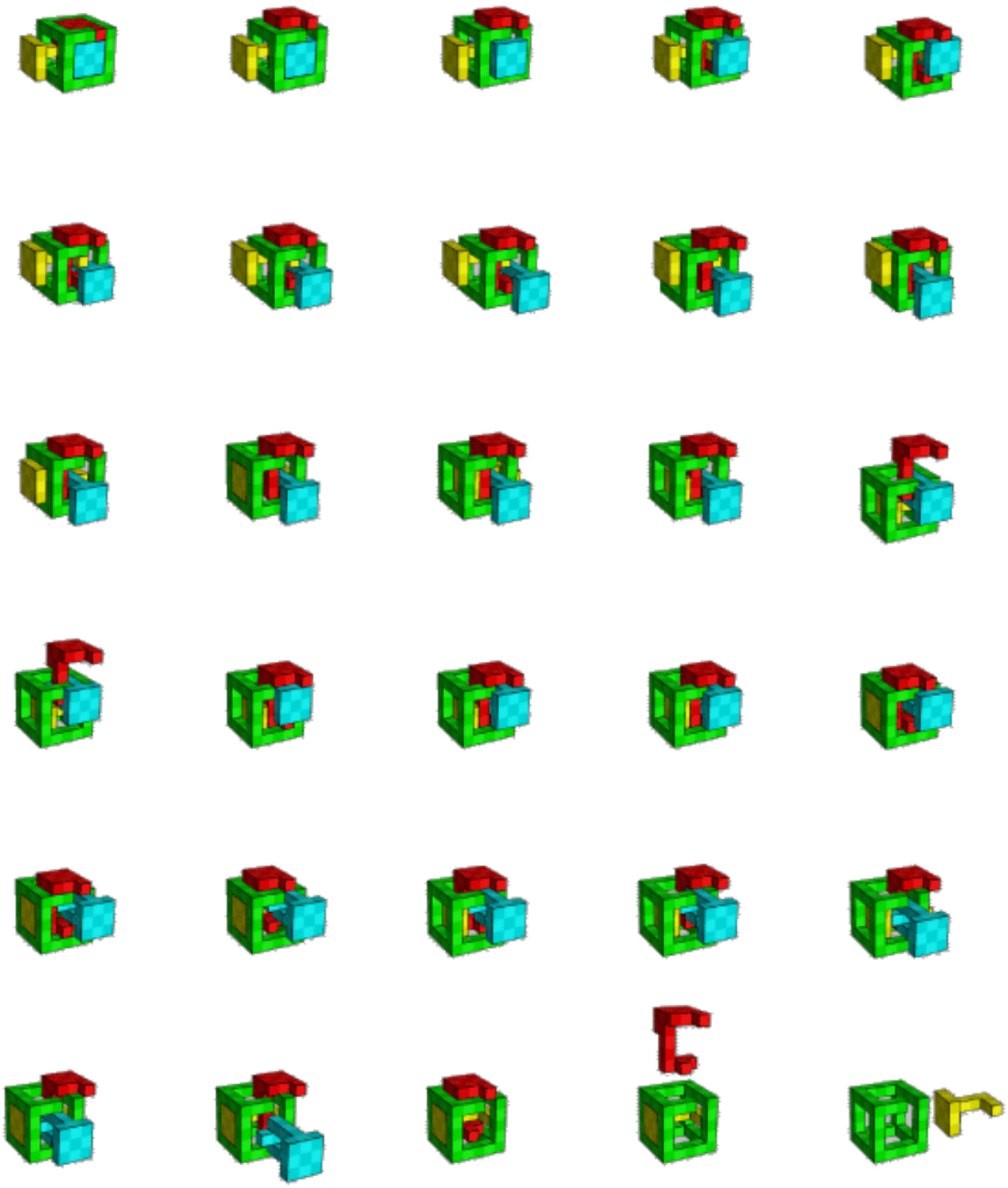
# 49 Three Totally Trapped Sages

**Puzzle Solution**:



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**50**

# Three Trapped Sages

**Puzzle Goal:** **Remove the three pieces from the cubic structure, and reassemble the cube.**

**Materials:** Walnut and canarywood

**Classification:** Interlocking, framed burr

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# 50 Three Trapped Sages

**Puzzle Solution**:

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# 51 Toblerone Puzzle

**Puzzle Goal:** **Take the puzzle apart, eat chocolate, purchase new chocolate, re-assemble.**

**Materials:** Nut and hornbeam

**Classification:** Interlocking

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# 51 Toblerone Puzzle

**Puzzle Solution**:

Assemble the 3 wooden frame pieces to form a triangular cross-section. Insert a bar (or at least an empty box) of 100g Toblerone to lock the pieces together.

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# 52 Trick Domino Aligned

**Puzzle Goal:** **Mix up, then restore the cube.**

**Materials:** ABS and Polyurethane resin

**Classification:** Rotating Cube

**Notes:** Despite the 2x2x2 appearance, this is really a 3x3x2 Domino puzzle.

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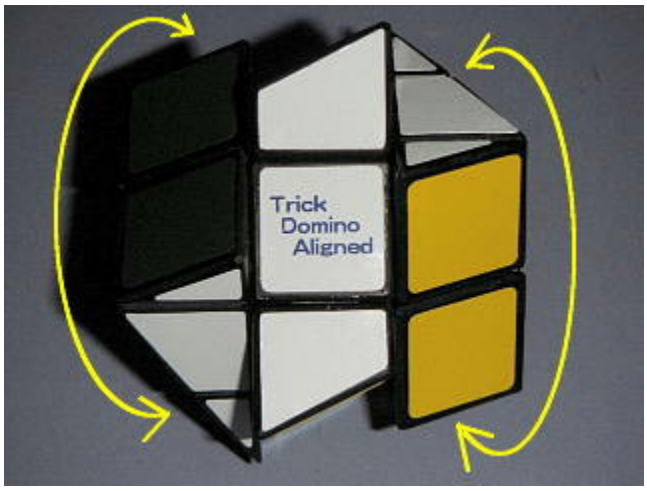
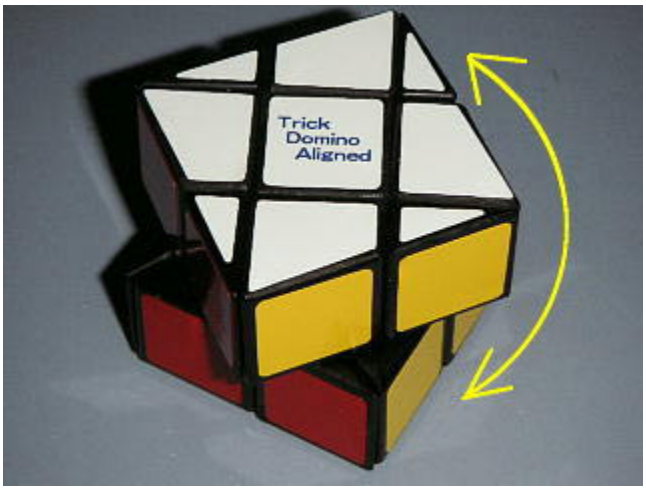
# 52 Trick Domino Aligned

**Puzzle Solution**:

Solve like Rubik's Domino (3x3x2).

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# 53 Trick Domino Twisted

**Puzzle Goal:** **Mix up, then restore the cube.**

**Materials:** ABS and Polyurethane resin

**Classification:** Rotating Cube

**Notes:** Despite the 2x2x2 appearance, this is really a 3x3x2 Domino puzzle, with the orientations of the top and bottom halves "twisted".

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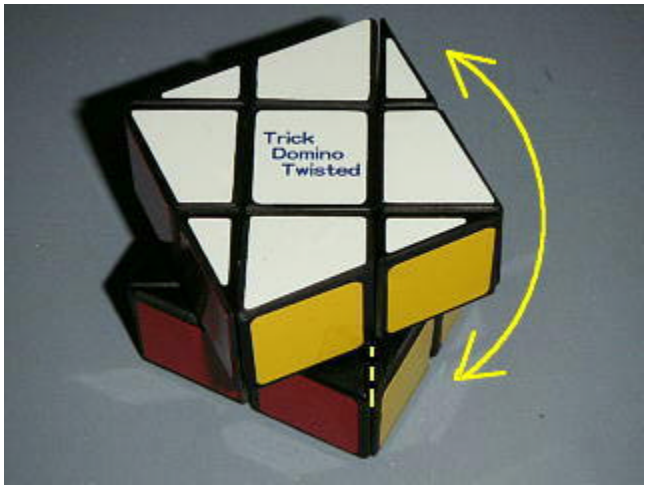
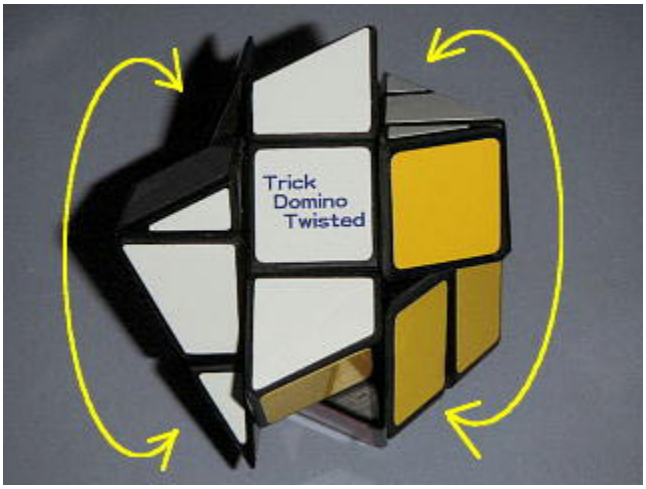
# 53 Trick Domino Twisted

**Puzzle Solution**:

Solve like Rubik's Domino (3x3x2).

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**54**

# Triples

**Puzzle Goal:** **Assemble the 8x4x3 block.**

**Materials:** Wood

**Classification:** 3D Assembly

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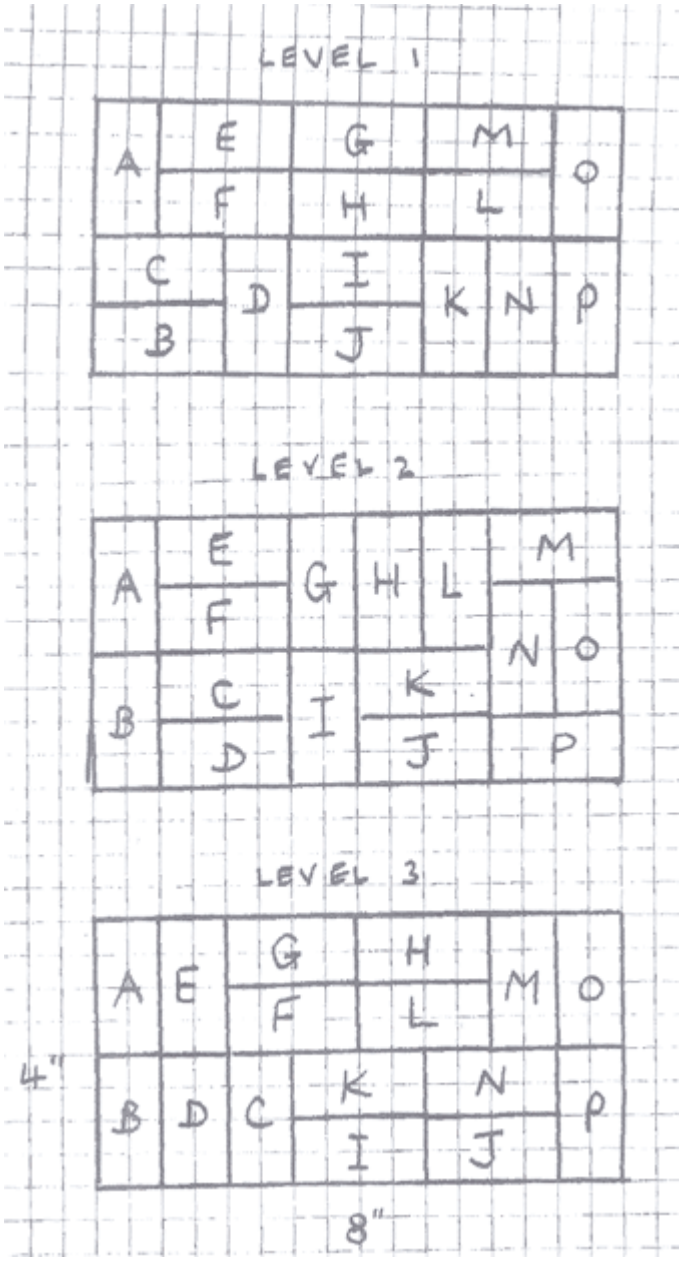
# 54 Triples

**Puzzle Solution**:

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